

## GCM series / &lt;100V Max&gt;

Apr.2024

## Features

1. GCM series is for **power-train, safety equipment** of automotive. For other automotive equipment such as comfort, security, information and entertainment, GRM series is available.
2. GCM series meets **AEC-Q200** requirements.
3. GCM series is offered with a Ni barrier termination plated with Matte Tin (Sn), and is RoHS compliant.
4. TA chip capacitor replacement product lineup is available in X7R (X7S) temperature characteristics.
5. No polarity.
6. Stringent dimensional tolerances allow highly reliable, high speed automatic chip placement on PCBs.

## Global Part Numbering

GC M 18 8 R7 1H 102 K A37 D

-1- -2- -3- -4- -5- -6- -7- -8- -9- -10-

## -1-:Product ID

| Code | Product                              |
|------|--------------------------------------|
| GC   | For Power-train,<br>Safety Equipment |

## -2-:Series

| Code | Product                   |
|------|---------------------------|
| M    | Tin Plated<br>Termination |

## -3-:Dimension (LxW)

| Code | Dimension (LxW)       |
|------|-----------------------|
| 03   | 0.6x0.3mm (EIA:0201)  |
| 15   | 1.0x0.5mm (EIA:0402)  |
| 18   | 1.6x0.8mm (EIA:0603)  |
| 21   | 2.0x1.25mm (EIA:0805) |
| 31   | 3.2x1.6mm (EIA:1206)  |
| 32   | 3.2x2.5mm (EIA:1210)  |

## -4-:Dimension (T)

| Code | Dimension (T) |
|------|---------------|
| 3    | 0.3mm         |
| 5    | 0.5mm         |
| 6    | 0.6mm         |
| 8    | 0.8mm         |
| 9    | 0.85mm        |
| A    | 1.0mm         |
| M    | 1.15mm        |
| B    | 1.25mm        |
| C    | 1.6mm         |
| D    | 2.0mm         |
| E    | 2.5mm         |

## -9-:Individual Specification Code

## -10-:Packaging

| Code | Packaging               |
|------|-------------------------|
| D    | φ 180mm Paper Taping    |
| L    | φ 180mm Embossed Taping |
| J    | φ 330mm Paper Taping    |
| K    | φ 330mm Embossed Taping |

## -5-:Temperature Characteristics

| Code | TC  | Temp. Range     | Cap. Change                                                                                                                                                                 | Operating Temp. |
|------|-----|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| R7   | X7R | -55 to 125 degC | +/-15%                                                                                                                                                                      | -55 to 125 degC |
| C7   | X7S |                 | +/-22%                                                                                                                                                                      |                 |
| D7   | X7T |                 | +22%,-33%                                                                                                                                                                   |                 |
| 9E   | ZLM |                 | -4700+1000/-2500ppm/°C<br>(-55°C to -40°C)<br>-5350+/-750ppm/°C<br>(-40°C to +20°C)<br>-4700+/-500ppm/°C<br>(+20°C to +85°C)<br>-4700+2000/-1000ppm/°C<br>(+85°C to +125°C) |                 |
| 7U   | U2J | 25 to 85 degC   | -750+/-120ppm/°C                                                                                                                                                            | -55 to 150 degC |
| 5C   | C0G | 25 to 125 degC  | 0+/-30ppm/°C                                                                                                                                                                |                 |
| 5G   | X8G | 25 to 150 degC  | 0+/-30ppm/°C                                                                                                                                                                |                 |
| L8   | X8L | -55 to 150 degC | +15/-40%                                                                                                                                                                    |                 |
| M8   | X8M |                 | +15/-50%                                                                                                                                                                    |                 |
| N8   | X8N |                 | +15/-60%                                                                                                                                                                    |                 |
| R9   | X8R |                 | +/-15%                                                                                                                                                                      |                 |

## -6-:Rated Voltage

| Code | Rated Voltage |
|------|---------------|
| 0E   | DC 2.5V       |
| 0G   | DC 4V         |
| 0J   | DC 6.3V       |
| 1A   | DC 10V        |
| 1C   | DC 16V        |
| 1E   | DC 25V        |
| YA   | DC 35V        |
| 1H   | DC 50V        |
| 1K   | DC 80V        |
| 2A   | DC 100V       |
| EA   | DC 2.5V( *)   |
| EB   | DC 4V( *)     |
| EE   | DC 16V( *)    |
| EF   | DC 25V( *)    |
| EG   | DC 35V( *)    |
| EH   | DC 50V( *)    |
| EL   | DC 100V( *)   |

\* : Rated voltage  
Z derating product

## -7-:Capacitance

| Code | Capacitance |
|------|-------------|
| 1R0  | 1pF         |
| 100  | 10pF        |
| 101  | 100pF       |
| 102  | 1,000pF     |
| 103  | 0.01μF      |
| 104  | 0.1μF       |
| 105  | 1μF         |
| 106  | 10μF        |

## -8-:Capacitance Tolerance

| Code | Cap. Tol. | TC                 |
|------|-----------|--------------------|
| B    | +/-0.1pF  | C0G (1 to 5pF)     |
| C    | +/-0.25pF | C0G (1 to 9.9pF)   |
| D    | +/-0.5pF  | C0G (5.1 to 9.9pF) |
| F    | +/-1%     | C0G (10pF)         |
| G    | +/-2%     | C0G (10pF & over)  |
| J    | +/-5%     | C0G (10pF & over)  |
| J    | +/-5%     | C8G (10pF & over)  |
| K    | +/-10%    | X8_                |
| K    | +/-10%    | X7_                |
| M    | +/-20%    | X8_                |
| M    | +/-20%    | X7_                |

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<X7R,X7S,X7T Type>  
Chip size and Capacitance range  
< X7R,X7S,X7T >

M.P. (Recommend)    Not Recommended    Under Development

| Type   | Size (inch) | WV  | Capacitance |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|--------|-------------|-----|-------------|-----|-----|----|-----|-----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|
|        |             |     | pF          |     |     | nF |     |     |    |    |    |     |     |     |     | μF  |     |     |     |    |     |     |
|        |             |     | 100         | 220 | 470 | 1  | 2.2 | 4.7 | 10 | 22 | 47 | 100 | 220 | 470 | 1   | 2.2 | 4.7 | 10  | 22  | 47 | 100 | 220 |
| GCM 03 | 0201        | 25  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 16  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 10  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 4   |             |     |     |    |     |     |    |    |    |     |     |     | X7T |     |     |     |     |    |     |     |
|        |             | 2.5 |             |     |     |    |     |     |    |    |    |     |     |     | X7T |     |     |     |     |    |     |     |
| GCM 15 | 0402        | 100 |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 50  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 25  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 16  |             |     |     |    |     |     |    |    |    |     |     |     | X7S | X7S |     |     |     |    |     |     |
|        |             | 10  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 4   |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     | X7T |     |    |     |     |
|        |             | 2.5 |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     | X7T |    |     |     |
| GCM 18 | 0603        | 100 |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 50  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 25  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 16  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 10  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 6.3 |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 4   |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
| GCM 21 | 0805        | 100 |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 50  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 35  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 25  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 16  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 10  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 6.3 |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
| GCM 31 | 1206        | 100 |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 50  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 35  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 25  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 16  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 10  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 6.3 |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
| GCM 32 | 1210        | 100 |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 50  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 35  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 25  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 16  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 10  |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |
|        |             | 6.3 |             |     |     |    |     |     |    |    |    |     |     |     |     |     |     |     |     |    |     |     |

## GCM series / &lt;100V Max&gt;

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## &lt;X7R,X7S,X7T Type&gt;

## Murata P/N List &lt; 0201 size / X7R,X7S,X7T &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 0201        | 0.3+/-0.03  | X7R | 25  | 100pF   | +/-10%  | GCM033R71E101KA03D | Available | Mass Production |
|             | 0.3+/-0.03  | X7R |     | 220pF   | +/-10%  | GCM033R71E221KA03D | Available | Mass Production |
|             | 0.3+/-0.03  | X7R |     | 470pF   | +/-10%  | GCM033R71E471KA03D | Available | Mass Production |
|             | 0.3+/-0.03  | X7R |     | 1,000pF | +/-10%  | GCM033R71E102KA03D | Available | Mass Production |
|             | 0.3+/-0.03  | X7R |     | 2,200pF | +/-10%  | GCM033R71E222KE02D | Available | Mass Production |
|             | 0.3+/-0.03  | X7R | 16  | 2,200pF | +/-10%  | GCM033R71C222KA55D | Available | Mass Production |
|             | 0.3+/-0.03  | X7R | 10  | 2,200pF | +/-10%  | GCM033R71A222KA03D | Available | Mass Production |
|             | 0.3+/-0.03  | X7R |     | 4,700pF | +/-10%  | GCM033R71A472KA03D | Available | Mass Production |
|             | 0.3+/-0.03  | X7R |     | 0.01μF  | +/-10%  | GCM033R71A103KA03D | Available | Mass Production |
|             | 0.3+/-0.09  | X7T | 4   | 1μF     | +/-20%  | GCM033D70G105ME36D | Available | Mass Production |
|             | 0.3+/-0.09  | X7T | 2.5 | 1μF     | +/-20%  | GCM033D70E105ME36D | Available | Mass Production |

## Murata P/N List &lt; 0402 size / X7R,X7S ,X7T &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 0402        | 0.5+/-0.05  | X7R | 100 | 220pF   | +/-10%  | GCM155R72A221KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 470pF   | +/-10%  | GCM155R72A471KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 1,000pF | +/-10%  | GCM155R72A102KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 2,200pF | +/-10%  | GCM155R72A222KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 4,700pF | +/-10%  | GCM155R72A472KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R | 50  | 220pF   | +/-10%  | GCM155R71H221KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 470pF   | +/-10%  | GCM155R71H471KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 1,000pF | +/-10%  | GCM155R71H102KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 2,200pF | +/-10%  | GCM155R71H222KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 4,700pF | +/-10%  | GCM155R71H472KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 0.01μF  | +/-10%  | GCM155R71H103KA55D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 0.022μF | +/-10%  | GCM155R71H223KA55D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 0.047μF | +/-10%  | GCM155R71H473KE02D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 0.1μF   | +/-10%  | GCM155R71H104KE02D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R | 25  | 4,700pF | +/-10%  | GCM155R71E472KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 0.01μF  | +/-10%  | GCM155R71E103KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 0.022μF | +/-10%  | GCM155R71E223KA55D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 0.047μF | +/-10%  | GCM155R71E473KA55D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 0.1μF   | +/-10%  | GCM155R71E104KE02D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R | 16  | 0.047μF | +/-10%  | GCM155R71C473KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 0.1μF   | +/-10%  | GCM155R71C104KA55D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R |     | 0.22μF  | +/-10%  | GCM155R71C224KE02D | Available | Mass Production |
|             | 0.5+/-0.05  | X7R | 10  | 0.1μF   | +/-10%  | GCM155R71A104KA55D | Available | Mass Production |
|             | 0.5+/-0.1   | X7S |     | 0.47μF  | +/-10%  | GCM155C71A474KE36D | Available | Mass Production |
|             | 0.5+/-0.2   | X7S |     | 1μF     | +/-10%  | GCM155C71A105KE38D | Available | Mass Production |
|             | 0.5+/-0.2   | X7T | 4   | 4.7μF   | +/-20%  | GCM155D70G475ME36D | Available | Mass Production |
|             | 0.5+/-0.2   | X7T | 2.5 | 10μF    | +/-20%  | GCM155D70E106ME36D | Available | Mass Production |

## GCM series / &lt;100V Max&gt;

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## &lt;X7R,X7S,X7T Type&gt;

Murata P/N List &lt; 0603 size / X7R,X7S,X7T &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 0603        | 0.8+/-0.1   | X7R | 100 | 1,000pF | +/-10%  | GCM188R72A102KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 2,200pF | +/-10%  | GCM188R72A222KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 4,700pF | +/-10%  | GCM188R72A472KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.01μF  | +/-10%  | GCM188R72A103KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.022μF | +/-10%  | GCM188R72A223KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R | 50  | 1,000pF | +/-10%  | GCM188R71H102KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 2,200pF | +/-10%  | GCM188R71H222KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 4,700pF | +/-10%  | GCM188R71H472KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.01μF  | +/-10%  | GCM188R71H103KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.022μF | +/-10%  | GCM188R71H223KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.047μF | +/-10%  | GCM188R71H473KA55D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.1μF   | +/-10%  | GCM188R71H104KA57D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.22μF  | +/-10%  | GCM188R71H224KA64D | Available | Mass Production |
|             | 0.9+/-0.1   | X7R |     | 1uF     | +/-10%  | GCM188D71H105KE36D | Available | Mass Production |
|             | 0.9+/-0.1   | X7R | 35  | 1uF     | +/-10%  | GCM188D71H105KE36D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R | 25  | 1,000pF | +/-10%  | GCM188R71E102KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 2,200pF | +/-10%  | GCM188R71E222KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 4,700pF | +/-10%  | GCM188R71E472KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.01μF  | +/-10%  | GCM188R71E103KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.022μF | +/-10%  | GCM188R71E223KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.047μF | +/-10%  | GCM188R71E473KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.1μF   | +/-10%  | GCM188R71E104KA57D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.22μF  | +/-10%  | GCM188R71E224KA55D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.47μF  | +/-10%  | GCM188R71E474KA64D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 1uF     | +/-10%  | GCM188R71E105KA64D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R | 16  | 0.1μF   | +/-10%  | GCM188R71C104KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 0.47μF  | +/-10%  | GCM188R71C474KA55D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R |     | 1uF     | +/-10%  | GCM188R71C105KA64D | Available | Mass Production |
|             | 0.8+/-0.1   | X7S | 10  | 2.2μF   | +/-10%  | GCM188C71A225KE02D | Available | Mass Production |
|             | 0.8+/-0.1   | X7R | 6   | 2.2μF   | +/-10%  | GCM188R70J225KE22D | Available | Mass Production |
|             | 0.8+/-0.2   | X7T |     | 10μF    | +/-20%  | GCM188D70J106ME36D | Available | Mass Production |
|             | 0.8+/-0.2   | X7T |     | 10μF    | +/-20%  | GCM188D70G106ME36D | Available | Mass Production |
|             | 0.8+/-0.2   | X7T | 2.5 | 22μF    | +/-20%  | GCM188D70E226ME36D | Available | Mass Production |

1) “\*\*” of under development P/N have not fixed yet.

2) Q1 = January to March, Q2 = April to June, Q3 = July to September, Q4 = October to December

3) This is muRata's development schedule, which may change due to progress of each development works.

4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.

5) Sample marked “-” in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.

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## &lt;X7R,X7S,X7T Type&gt;

Murata P/N List &lt; 0805 size / X7R , X7S , X7T &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 0805        | 0.6+/-0.1   | X7R | 100 | 1,000pF | +/-10%  | GCM216R72A102KA37D | Available | Mass Production |
|             | 0.6+/-0.1   | X7R |     | 2,200pF | +/-10%  | GCM216R72A222KA37D | Available | Mass Production |
|             | 0.6+/-0.1   | X7R |     | 4,700pF | +/-10%  | GCM216R72A472KA37D | Available | Mass Production |
|             | 0.6+/-0.1   | X7R |     | 0.01μF  | +/-10%  | GCM216R72A103KA37D | Available | Mass Production |
|             | 1.25+/-0.10 | X7R |     | 0.01μF  | +/-10%  | GCM21BR72A103KA37L | Available | Mass Production |
|             | 0.6+/-0.1   | X7R |     | 0.022μF | +/-10%  | GCM216R72A223KA37D | Available | Mass Production |
|             | 1.25+/-0.10 | X7R |     | 0.022μF | +/-10%  | GCM21BR72A223KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 0.047μF | +/-10%  | GCM21BR72A473KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 0.1μF   | +/-10%  | GCM21BR72A104KA37L | Available | Mass Production |
|             | 1.25+/-0.2  | X7S |     | 1μF     | +/-10%  | GCM21BC72A105KE36L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R | 50  | 0.047μF | +/-10%  | GCM21BR71H473KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 0.1μF   | +/-10%  | GCM21BR71H104KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 0.22μF  | +/-10%  | GCM21BR71H224KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 0.47μF  | +/-10%  | GCM21BR71H474KA55L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 1μF     | +/-10%  | GCM21BR71H105KA03L | Available | Mass Production |
|             | 1.25+/-0.20 | X7T |     | 2.2μF   | +/-10%  | GCM21BD71H225KE36L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R | 35  | 1μF     | +/-10%  | GCM21BR7YA105KA55L | Available | Mass Production |
|             | 1.25+/-0.2  | X7S |     | 2.2μF   | +/-10%  | GCM21BC7YA225KE02L | Available | Mass Production |
|             | 1.25+/-0.2  | X7S |     | 4.7μF   | +/-10%  | GCM21BC7YA475KE36L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R | 16  | 0.1μF   | +/-10%  | GCM21BR71E104KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 0.22μF  | +/-10%  | GCM21BR71E224KA37L | Available | Mass Production |
|             | 0.85+/-0.1  | X7R |     | 0.47μF  | +/-10%  | GCM21BR71E474KA55D | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 1μF     | +/-10%  | GCM21BR71E105KA56L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 2.2μF   | +/-10%  | GCM21BR71E225KA73L | Available | Mass Production |
|             | 1.25+/-0.2  | X7S |     | 4.7μF   | +/-10%  | GCM21BC71E475KE36L | Available | Mass Production |
|             | 1.25+/-0.2  | X7S |     | 10μF    | +/-10%  | GCM21BC71E106KE36L | Available | Mass Production |
|             | 0.85+/-0.1  | X7R |     | 0.22μF  | +/-10%  | GCM219R71C224KA37D | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 0.47μF  | +/-10%  | GCM21BR71C474KA37L | Available | Mass Production |
|             | 0.85+/-0.1  | X7R |     | 1μF     | +/-10%  | GCM219R71C105KA37D | Available | Mass Production |
|             | 1.25+/-0.15 | X7R | 6.3 | 2.2μF   | +/-10%  | GCM21BR71C225KA64L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 4.7μF   | +/-10%  | GCM21BR71C475KA73L | Available | Mass Production |
|             | 1.25+/-0.2  | X7S |     | 10μF    | +/-10%  | GCM21BC71C106KE36L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 2.2μF   | +/-10%  | GCM21BR71A225KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X7S |     | 4.7μF   | +/-10%  | GCM21BC71A475KA73L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 10μF    | +/-10%  | GCM21BR71A106KE22L | Available | Mass Production |
|             | 1.25+/-0.15 | X7T |     | 10μF    | +/-10%  | GCM21BD70J106KE02L | Available | Mass Production |
|             | 1.25+/-0.15 | X7R |     | 10μF    | +/-10%  | GCM21BR70J106KE22L | Available | Mass Production |
|             | 1.25+/-0.2  | X7T |     | 22μF    | +/-20%  | GCM21BD70J226ME36L | Available | Mass Production |
|             | 1.25+/-0.2  | X7T | 4   | 22μF    | +/-20%  | GCM21BD70G226ME36L | Available | Mass Production |

1) “\*” of under development P/N have not fixed yet.

2) Q1 = January to March, Q2 = April to June, Q3 = July to September, Q4 = October to December

3) This is muRata's development schedule, which may change due to progress of each development works.

4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.

5) Sample marked “-” in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.



## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;X7R,X7S,X7T Type&gt;

## Murata P/N List &lt; 1206 size / X7R,X7S,X7T &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap    | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|--------|---------|--------------------|-----------|-----------------|
| 1206        | 0.85+/-0.1  | X7R | 100 | 0.1μF  | +/-10%  | GCM319R72A104KA37D | Available | Mass Production |
|             | 1.15+/-0.1  | X7R |     | 0.22μF | +/-10%  | GCM31MR72A224KA37L | Available | Mass Production |
|             | 1.6+/-0.2   | X7R |     | 1.0μF  | +/-10%  | GCM31CR72A105KA03L | Available | Mass Production |
|             | 1.6+/-0.2   | X7S |     | 2.2μF  | +/-10%  | GCM31CC72A225KE02L | Available | Mass Production |
|             | 1.15+/-0.1  | X7R | 50  | 0.1μF  | +/-10%  | GCM31MR71H104KA37L | Available | Mass Production |
|             | 1.15+/-0.1  | X7R |     | 0.22μF | +/-10%  | GCM31MR71H224KA37L | Available | Mass Production |
|             | 1.15+/-0.1  | X7R |     | 0.47μF | +/-10%  | GCM31MR71H474KA37L | Available | Mass Production |
|             | 1.15+/-0.1  | X7R |     | 1μF    | +/-10%  | GCM31MR71H105KA55L | Available | Mass Production |
|             | 1.6+/-0.2   | X7R |     | 2.2μF  | +/-10%  | GCM31CR71H225KA55L | Available | Mass Production |
|             | 1.6+/-0.2   | X7S |     | 4.7μF  | +/-10%  | GCM31CC71H475KA03L | Available | Mass Production |
|             | 1.6+/-0.3   | X7T | 35  | 10μF   | -/+10%  | GCM31CD7YA106KE36L | Available | Mass Production |
|             | 0.85+/-0.1  | X7R | 25  | 0.22μF | +/-10%  | GCM319R71E224KA37D | Available | Mass Production |
|             | 1.15+/-0.1  | X7R |     | 0.47μF | +/-10%  | GCM31MR71E474KA37L | Available | Mass Production |
|             | 1.15+/-0.1  | X7R |     | 1μF    | +/-10%  | GCM31MR71E105KA37L | Available | Mass Production |
|             | 1.15+/-0.15 | X7R |     | 2.2μF  | +/-10%  | GCM31MR71E225KA57L | Available | Mass Production |
|             | 1.6+/-0.2   | X7R |     | 4.7μF  | +/-10%  | GCM31CR71E475KA55L | Available | Mass Production |
|             | 1.6+/-0.3   | X7S |     | 10μF   | +/-10%  | GCM31CC71E106KA03L | Available | Mass Production |
|             | 1.6+/-0.2   | X7R | 16  | 4.7μF  | +/-10%  | GCM31CR71C475KA37L | Available | Mass Production |
|             | 1.6+/-0.2   | X7R |     | 10μF   | +/-10%  | GCM31CR71C106KA64L | Available | Mass Production |
|             | 1.6+/-0.3   | X7S |     | 22μF   | +/-20%  | GCM31CC71C226ME36L | Available | Mass Production |
|             | 1.6+/-0.2   | X7R | 10  | 10μF   | +/-10%  | GCM31CR71A106KA64L | Available | Mass Production |
|             | 1.6+/-0.2   | X7R |     | 22μF   | +/-10%  | GCM31CR71A226KE02L | Available | Mass Production |
|             | 1.6+/-0.2   | X7T |     | 22μF   | +/-10%  | GCM31CD70J226KE02L | Available | Mass Production |
|             | 1.6+/-0.2   | X7R | 6.3 | 22μF   | +/-10%  | GCM31CR70J226KE23L | Available | Mass Production |
|             | 1.6+/-0.2   | X7T |     | 47μF   | +/-20%  | GCM31CD70G476ME02L | Available | Mass Production |

## Murata P/N List &lt; 1210 size / X7R,X7S,X7T &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap    | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|--------|---------|--------------------|-----------|-----------------|
| 1210        | 2.0+/-0.2   | X7S | 100 | 4.7μF  | +/-10%  | GCM32DC72A475KE02L | Available | Mass Production |
|             | 2.0+/-0.2   | X7R | 50  | 0.47μF | +/-10%  | GCM32DR71H474KA37L | Available | Mass Production |
|             | 2.5+/-0.2   | X7R |     | 1μF    | +/-10%  | GCM32ER71H105KA37L | Available | Mass Production |
|             | 2.5+/-0.2   | X7R |     | 4.7μF  | +/-10%  | GCM32ER71H475KA55L | Available | Mass Production |
|             | 2.5+/-0.2   | X7S |     | 10μF   | +/-10%  | GCM32EC71H106KA03L | Available | Mass Production |
|             | 2.5+/-0.2   | X7S | 35  | 10μF   | +/-10%  | GCM32EC7YA106KA03L | Available | Mass Production |
|             | 2.0+/-0.2   | X7R | 25  | 4.7μF  | +/-10%  | GCM32DR71E475KA55L | Available | Mass Production |
|             | 2.5+/-0.2   | X7R |     | 10μF   | +/-10%  | GCM32ER71E106KA57L | Available | Mass Production |
|             | 2.5+/-0.2   | X7S |     | 22μF   | +/-10%  | GCM32EC71E226KE36L | Available | Mass Production |
|             | 2.0+/-0.2   | X7R | 16  | 10μF   | +/-10%  | GCM32DR71C106KA37L | Available | Mass Production |
|             | 2.5+/-0.2   | X7R |     | 22μF   | +/-10%  | GCM32ER71C226KE19L | Available | Mass Production |
|             | 2.5+/-0.2   | X7R | 10  | 22μF   | +/-10%  | GCM32ER71A226KE12L | Available | Mass Production |
|             | 2.5+/-0.2   | X7S |     | 47μF   | +/-10%  | GCM32EC71A476KE02L | Available | Mass Production |
|             | 2.5+/-0.2   | X7T | 6.3 | 47μF   | -/+10%  | GCM32ED70J476KE02L | Available | Mass Production |
|             | 2.5+/-0.2   | X7R |     | 47μF   | +/-10%  | GCM32ER70J476KE19L | Available | Mass Production |
|             | 2.5+/-0.35  | X7T | 2.5 | 100μF  | +/-20%  | GCM32ED70E107ME36L | Available | Mass Production |
|             | 2.7+/-0.1   | X7T |     | 220μF  | +/-20%  | GCM32ED70E227ME36L | Available | Mass Production |

GCM series / <100V Max>

Apr.2024

<C0G Type>

Chip size and Capacitance range

< C0G >

M.P. (Recommend)      Not Recommended

| Type  | Size (inch) | W.V | Capacitance |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |
|-------|-------------|-----|-------------|----|--|--|-----|--|--|---|----|--|--|-----|--|--|-----|--|--|
|       |             |     | pF          |    |  |  |     |  |  |   | nF |  |  |     |  |  | μ F |  |  |
|       |             |     | 1           | 10 |  |  | 100 |  |  | 1 | 10 |  |  | 100 |  |  |     |  |  |
| GCM03 | 0201        | 50  |             |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |
|       |             | 25  |             |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |
| GCM15 | 0402        | 100 |             |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |
|       |             | 50  |             |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |
| GCM18 | 0603        | 100 |             |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |
|       |             | 50  |             |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |
| GCM21 | 0805        | 100 |             |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |
|       |             | 50  |             |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |
| GCM31 | 3216M       | 100 |             |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |
|       |             | 50  |             |    |  |  |     |  |  |   |    |  |  |     |  |  |     |  |  |

<U2J Type>

Chip size and Capacitance range

< U2J >

| Type  | Size (inch) | W.V | Capacitance |    |     |   |    |     |   |    |     |    |  |  |  |  |  |  |
|-------|-------------|-----|-------------|----|-----|---|----|-----|---|----|-----|----|--|--|--|--|--|--|
|       |             |     | pF          |    |     |   |    |     |   |    |     | nF |  |  |  |  |  |  |
|       |             |     | 1           | 10 | 100 | 1 | 10 | 100 | 1 | 10 | 100 |    |  |  |  |  |  |  |
| GCM18 | 0603        | 100 |             |    |     |   |    |     |   |    |     |    |  |  |  |  |  |  |
|       |             | 50  |             |    |     |   |    |     |   |    |     |    |  |  |  |  |  |  |

## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;C0G Type&gt;

## Murata P/N List &lt; 0201 size / C0G / 50V &gt;

| Size (inch) | Chip T (mm) | TC  | WV | Cap   | Cap Tol   | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|----|-------|-----------|--------------------|-----------|-----------------|
| 0201        | 0.3+/-0.03  | C0G | 50 | 1pF   | +/-0.25pF | GCM0335C1H1R0CA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 2pF   | +/-0.25pF | GCM0335C1H2R0CA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 3pF   | +/-0.25pF | GCM0335C1H3R0CA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 4pF   | +/-0.25pF | GCM0335C1H4R0CA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 5pF   | +/-0.25pF | GCM0335C1H5R0CA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 6pF   | +/-0.5pF  | GCM0335C1H6R0DA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 7pF   | +/-0.5pF  | GCM0335C1H7R0DA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 8pF   | +/-0.5pF  | GCM0335C1H8R0DA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 9pF   | +/-0.5pF  | GCM0335C1H9R0DA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 10pF  | +/-5%     | GCM0335C1H100JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 15pF  | +/-5%     | GCM0335C1H150JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 22pF  | +/-5%     | GCM0335C1H220JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 33pF  | +/-5%     | GCM0335C1H330JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 47pF  | +/-5%     | GCM0335C1H470JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 68pF  | +/-5%     | GCM0335C1H680JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 100pF | +/-5%     | GCM0335C1H101JA16D | Available | Mass Production |

## Murata P/N List &lt; 0201 size / C0G / 25V &gt;

| Size (inch) | Chip T (mm) | TC  | WV | Cap   | Cap Tol   | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|----|-------|-----------|--------------------|-----------|-----------------|
| 0201        | 0.3+/-0.03  | C0G | 25 | 1pF   | +/-0.25pF | GCM0335C1E1R0CA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 2pF   | +/-0.25pF | GCM0335C1E2R0CA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 3pF   | +/-0.25pF | GCM0335C1E3R0CA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 4pF   | +/-0.25pF | GCM0335C1E4R0CA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 5pF   | +/-0.25pF | GCM0335C1E5R0CA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 6pF   | +/-0.5pF  | GCM0335C1E6R0DA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 7pF   | +/-0.5pF  | GCM0335C1E7R0DA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 8pF   | +/-0.5pF  | GCM0335C1E8R0DA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 9pF   | +/-0.5pF  | GCM0335C1E9R0DA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 10pF  | +/-5%     | GCM0335C1E100JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 15pF  | +/-5%     | GCM0335C1E150JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 22pF  | +/-5%     | GCM0335C1E220JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 33pF  | +/-5%     | GCM0335C1E330JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 47pF  | +/-5%     | GCM0335C1E470JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 68pF  | +/-5%     | GCM0335C1E680JA16D | Available | Mass Production |
|             | 0.3+/-0.03  | C0G |    | 100pF | +/-5%     | GCM0335C1E101JA16D | Available | Mass Production |

1) "\*" of under development P/N have not fixed yet.

2) Q1 = January to March, Q2 = April to June, Q3 = July to September, Q4 = October to December

3) This is muRata's development schedule, which may change due to progress of each development works.

4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.

5) Sample marked "-" in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.



GCM series / <100V Max>

Apr.2024

<C0G Type>

Murata P/N List < 0402 size / C0G / 100V >

| Size<br>(inch) | Chip T (mm) | TC  | WV  | Cap    | Cap Tol   | Murata Global P/N  | Sample    | M.P.            |
|----------------|-------------|-----|-----|--------|-----------|--------------------|-----------|-----------------|
| 0402           | 0.5+/-0.05  | C0G | 100 | 1pF    | -/+0.25pF | GCM1555C2A1R0CE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 10pF   | +/-5%     | GCM1555C2A100JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 15pF   | +/-5%     | GCM1555C2A150JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 22pF   | +/-5%     | GCM1555C2A220JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 33pF   | +/-5%     | GCM1555C2A330JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 47pF   | +/-5%     | GCM1555C2A470JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 68pF   | +/-5%     | GCM1555C2A680JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 100pF  | +/-5%     | GCM1555C2A101JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 150pF  | +/-5%     | GCM1555C2A151JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 220pF  | +/-5%     | GCM1555C2A221JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 330pF  | +/-5%     | GCM1555C2A331JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 470pF  | +/-5%     | GCM1555C2A471JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 680pF  | +/-5%     | GCM1555C2A681JE02D | Available | Mass Production |
|                | 0.5+/-0.05  | C0G |     | 1000pF | +/-5%     | GCM1555C2A102JE02D | Available | Mass Production |

## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;C0G Type&gt;

## Murata P/N List &lt; 0402 size / C0G / 50V &gt;

| Size (inch) | Chip T (mm) | TC  | WV | Cap    | Cap Tol   | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|----|--------|-----------|--------------------|-----------|-----------------|
| 0402        | 0.5+/-0.05  | C0G | 50 | 1pF    | +/-0.25pF | GCM1555C1H1R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 2pF    | +/-0.25pF | GCM1555C1H2R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 3pF    | +/-0.25pF | GCM1555C1H3R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 4pF    | +/-0.25pF | GCM1555C1H4R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 5pF    | +/-0.25pF | GCM1555C1H5R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 6pF    | +/-0.5pF  | GCM1555C1H6R0DA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 7pF    | +/-0.5pF  | GCM1555C1H7R0DA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 8pF    | +/-0.5pF  | GCM1555C1H8R0DA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 9pF    | +/-0.5pF  | GCM1555C1H9R0DA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 10pF   | +/-5%     | GCM1555C1H100JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 15pF   | +/-5%     | GCM1555C1H150JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 22pF   | +/-5%     | GCM1555C1H220JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 33pF   | +/-5%     | GCM1555C1H330JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 47pF   | +/-5%     | GCM1555C1H470JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 68pF   | +/-5%     | GCM1555C1H680JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 100pF  | +/-5%     | GCM1555C1H101JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 150pF  | +/-5%     | GCM1555C1H151JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 220pF  | +/-5%     | GCM1555C1H221JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 330pF  | +/-5%     | GCM1555C1H331JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 470pF  | +/-5%     | GCM1555C1H471JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 680pF  | +/-5%     | GCM1555C1H681JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | C0G |    | 1000pF | +/-5%     | GCM1555C1H102JA16D | Available | Mass Production |

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2) Q1 = January to March, Q2 = April to June, Q3 = July to September, Q4 = October to December

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4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.

5) Sample marked “-” in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.

## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;C0G Type&gt;

## Murata P/N List &lt; 0603 size / C0G / 100V &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol   | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|-----------|--------------------|-----------|-----------------|
| 0603        | 0.8+/-0.1   | C0G | 100 | 1pF     | +/-0.25pF | GCM1885C2A1R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 2pF     | +/-0.25pF | GCM1885C2A2R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 3pF     | +/-0.25pF | GCM1885C2A3R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 4pF     | +/-0.25pF | GCM1885C2A4R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 5pF     | +/-0.25pF | GCM1885C2A5R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 6pF     | +/-0.5pF  | GCM1885C2A6R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 7pF     | +/-0.5pF  | GCM1885C2A7R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 8pF     | +/-0.5pF  | GCM1885C2A8R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 9pF     | +/-0.5pF  | GCM1885C2A9R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 10pF    | +/-5%     | GCM1885C2A100JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 15pF    | +/-5%     | GCM1885C2A150JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 22pF    | +/-5%     | GCM1885C2A220JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 33pF    | +/-5%     | GCM1885C2A330JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 47pF    | +/-5%     | GCM1885C2A470JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 68pF    | +/-5%     | GCM1885C2A680JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 100pF   | +/-5%     | GCM1885C2A101JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 150pF   | +/-5%     | GCM1885C2A151JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 220pF   | +/-5%     | GCM1885C2A221JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 330pF   | +/-5%     | GCM1885C2A331JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 470pF   | +/-5%     | GCM1885C2A471JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 680pF   | +/-5%     | GCM1885C2A681JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 1,000pF | +/-5%     | GCM1885C2A102JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |     | 1,500pF | +/-5%     | GCM1885C2A152JA16D | Available | Mass Production |

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## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;C0G Type&gt;

## Murata P/N List &lt; 0603 size / C0G / 50V &gt;

| Size (inch) | Chip T (mm) | TC  | WV | Cap     | Cap Tol   | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|----|---------|-----------|--------------------|-----------|-----------------|
| 0603        | 0.8+/-0.1   | C0G | 50 | 1pF     | +/-0.25pF | GCM1885C1H1R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 2pF     | +/-0.25pF | GCM1885C1H2R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 3pF     | +/-0.25pF | GCM1885C1H3R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 4pF     | +/-0.25pF | GCM1885C1H4R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 5pF     | +/-0.25pF | GCM1885C1H5R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 6pF     | +/-0.5pF  | GCM1885C1H6R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 7pF     | +/-0.5pF  | GCM1885C1H7R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 8pF     | +/-0.5pF  | GCM1885C1H8R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 9pF     | +/-0.5pF  | GCM1885C1H9R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 10pF    | +/-5%     | GCM1885C1H100JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 15pF    | +/-5%     | GCM1885C1H150JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 22pF    | +/-5%     | GCM1885C1H220JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 33pF    | +/-5%     | GCM1885C1H330JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 47pF    | +/-5%     | GCM1885C1H470JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 68pF    | +/-5%     | GCM1885C1H680JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 100pF   | +/-5%     | GCM1885C1H101JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 150pF   | +/-5%     | GCM1885C1H151JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 220pF   | +/-5%     | GCM1885C1H221JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 330pF   | +/-5%     | GCM1885C1H331JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 470pF   | +/-5%     | GCM1885C1H471JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 680pF   | +/-5%     | GCM1885C1H681JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 1,000pF | +/-5%     | GCM1885C1H102JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 1,500pF | +/-5%     | GCM1885C1H152JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 2,200pF | +/-5%     | GCM1885C1H222JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 3,300pF | +/-5%     | GCM1885C1H332JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 4,700pF | +/-5%     | GCM1885C1H472JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 6,800pF | +/-5%     | GCM1885C1H682JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | C0G |    | 0.01μF  | +/-5%     | GCM1885C1H103JA16D | Available | Mass Production |

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## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;C0G Type&gt;

## Murata P/N List &lt; 0805 size / C0G / 100V &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 0805        | 0.6+/-0.1   | C0G | 100 | 100pF   | +/-5%   | GCM2165C2A101JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |     | 150pF   | +/-5%   | GCM2165C2A151JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |     | 220pF   | +/-5%   | GCM2165C2A221JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |     | 330pF   | +/-5%   | GCM2165C2A331JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |     | 470pF   | +/-5%   | GCM2165C2A471JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |     | 680pF   | +/-5%   | GCM2165C2A681JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |     | 1,000pF | +/-5%   | GCM2165C2A102JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |     | 1,500pF | +/-5%   | GCM2165C2A152JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |     | 2,200pF | +/-5%   | GCM2165C2A222JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |     | 3,300pF | +/-5%   | GCM2165C2A332JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |     | 0.015μF | +/-5%   | GCM2195C2A153JE02D | Available | Mass Production |
|             | 1.25+/-0.15 | C0G |     | 0.022μF | +/-5%   | GCM21B5C2A223JE02L | Available | Mass Production |

## Murata P/N List &lt; 0805 size / C0G / 50V &gt;

| Size (inch) | Chip T (mm) | TC  | WV | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|----|---------|---------|--------------------|-----------|-----------------|
| 0805        | 0.6+/-0.1   | C0G | 50 | 100pF   | +/-5%   | GCM2165C1H101JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |    | 150pF   | +/-5%   | GCM2165C1H151JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |    | 220pF   | +/-5%   | GCM2165C1H221JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |    | 330pF   | +/-5%   | GCM2165C1H331JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |    | 470pF   | +/-5%   | GCM2165C1H471JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |    | 680pF   | +/-5%   | GCM2165C1H681JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |    | 1,000pF | +/-5%   | GCM2165C1H102JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |    | 1,500pF | +/-5%   | GCM2165C1H152JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |    | 2,200pF | +/-5%   | GCM2165C1H222JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |    | 3,300pF | +/-5%   | GCM2165C1H332JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | C0G |    | 4,700pF | +/-5%   | GCM2165C1H472JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 6,800pF | +/-5%   | GCM2195C1H682JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 0.01μF  | +/-5%   | GCM2195C1H103JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 0.015μF | +/-5%   | GCM2195C1H153JA16D | Available | Mass Production |
|             | 1.25+/-0.15 | C0G |    | 0.022μF | +/-5%   | GCM21B5C1H223JA16L | Available | Mass Production |



## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;C0G Type&gt;

## Murata P/N List &lt; 1206 size / C0G / 100V &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 1206        | 0.85+/-0.1  | C0G | 100 | 1,000pF | +/-5%   | GCM3195C2A102JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |     | 1,500pF | +/-5%   | GCM3195C2A152JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |     | 2,200pF | +/-5%   | GCM3195C2A222JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |     | 3,300pF | +/-5%   | GCM3195C2A332JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |     | 4,700pF | +/-5%   | GCM3195C2A472JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |     | 6,800pF | +/-5%   | GCM3195C2A682JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |     | 0.01μF  | +/-5%   | GCM3195C2A103JA16D | Available | Mass Production |
|             | 1.6+/-0.2   | C0G |     | 0.1μF   | +/-5%   | GCM31C5C2A104JE02L | Available | Mass Production |

## Murata P/N List &lt; 1206 size / C0G / 50V &gt;

| Size (inch) | Chip T (mm) | TC  | WV | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|----|---------|---------|--------------------|-----------|-----------------|
| 1206        | 0.85+/-0.1  | C0G | 50 | 1,000pF | +/-5%   | GCM3195C1H102JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 1,500pF | +/-5%   | GCM3195C1H152JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 2,200pF | +/-5%   | GCM3195C1H222JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 3,300pF | +/-5%   | GCM3195C1H332JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 4,700pF | +/-5%   | GCM3195C1H472JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 6,800pF | +/-5%   | GCM3195C1H682JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 0.01μF  | +/-5%   | GCM3195C1H103JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 0.015μF | +/-5%   | GCM3195C1H153JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 0.022μF | +/-5%   | GCM3195C1H223JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | C0G |    | 0.033μF | +/-5%   | GCM3195C1H333JA16D | Available | Mass Production |
|             | 1.15+/-0.1  | C0G |    | 0.047μF | +/-5%   | GCM31M5C1H473JA16L | Available | Mass Production |
|             | 1.6+/-0.2   | C0G |    | 0.068μF | +/-5%   | GCM31C5C1H683JA16L | Available | Mass Production |
|             | 1.6+/-0.2   | C0G |    | 0.1μF   | +/-5%   | GCM31C5C1H104JA16L | Available | Mass Production |

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## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;U2J Type&gt;

## Murata P/N List &lt; 0603 size / U2J / 100V &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 0603        | 0.8+/-0.1   | U2J | 100 | 1,000pF | +/-5%   | GCM1887U2A102JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |     | 1,500pF | +/-5%   | GCM1887U2A152JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |     | 2,200pF | +/-5%   | GCM1887U2A222JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |     | 3,300pF | +/-5%   | GCM1887U2A332JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |     | 4,700pF | +/-5%   | GCM1887U2A472JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |     | 6,800pF | +/-5%   | GCM1887U2A682JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |     | 0.01μF  | +/-5%   | GCM1887U2A103JA16D | Available | Mass Production |

## Murata P/N List &lt; 0603 size / U2J / 50V &gt;

| Size (inch) | Chip T (mm) | TC  | WV | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|----|---------|---------|--------------------|-----------|-----------------|
| 0603        | 0.8+/-0.1   | U2J | 50 | 1,000pF | +/-5%   | GCM1887U1H102JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |    | 1,500pF | +/-5%   | GCM1887U1H152JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |    | 2,200pF | +/-5%   | GCM1887U1H222JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |    | 3,300pF | +/-5%   | GCM1887U1H332JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |    | 4,700pF | +/-5%   | GCM1887U1H472JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |    | 6,800pF | +/-5%   | GCM1887U1H682JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | U2J |    | 0.01μF  | +/-5%   | GCM1887U1H103JA16D | Available | Mass Production |

1) "\*" of under development P/N have not fixed yet.

2) Q1 = January to March, Q2 = April to June, Q3 = July to September, Q4 = October to December

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## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;X8L,X8M,X8N,X8R,X8G type&gt;

Chip size and Capacitance range

&lt; X8L,M8 &gt;

 M.P. (Recommend)

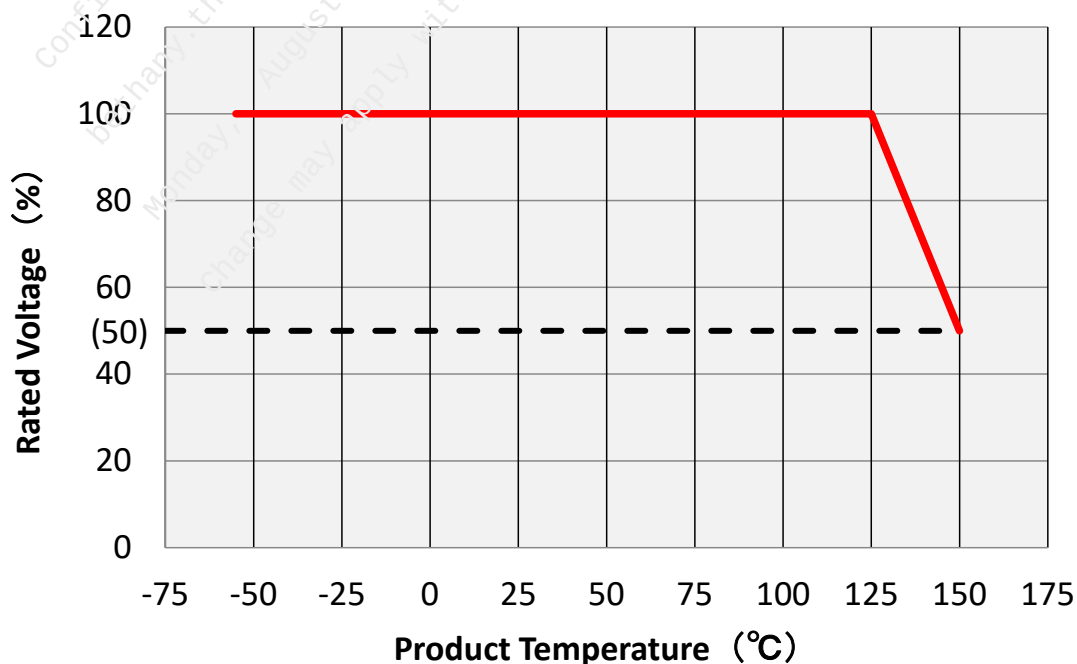
 Not Recommended

| Type  | Size<br>(inch) | WV  | Capacitance |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     |       |
|-------|----------------|-----|-------------|-----|----|-----|-----|----|----|----|-----|-----|-----|-------|-------|-------|-------|-------|----|-----|-------|
|       |                |     | pF          |     | nF |     |     |    |    |    |     |     |     |       | μF    |       |       |       |    |     |       |
|       |                |     | 220         | 470 | 1  | 2.2 | 4.7 | 10 | 22 | 47 | 100 | 220 | 470 | 1     | 2.2   | 4.7   | 10    | 22    | 47 | 100 | 220   |
| GCM03 | 0201           | 4   |             |     |    |     |     |    |    |    |     |     |     | X8M * |       |       |       |       |    |     |       |
|       |                | 2.5 |             |     |    |     |     |    |    |    |     |     |     | X8M * |       |       |       |       |    |     |       |
| GCM15 | 0402           | 50  |             |     |    |     |     |    |    | *  | *   |     |     |       |       |       |       |       |    |     |       |
|       |                | 25  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     |       |
|       |                | 16  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     |       |
|       |                | 4   |             |     |    |     |     |    |    |    |     |     |     |       |       | X8M * |       |       |    |     |       |
|       |                | 2.5 |             |     |    |     |     |    |    |    |     |     |     |       |       |       | X8M * |       |    |     |       |
| GCM18 | 0603           | 50  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     |       |
|       |                | 25  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     |       |
|       |                | 16  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     |       |
|       |                | 2.5 |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       | X8N * |    |     |       |
| GCM21 | 0805           | 50  |             |     |    |     |     |    |    |    |     |     |     |       | X8M * |       |       |       |    |     |       |
|       |                | 35  |             |     |    |     |     |    |    |    |     |     |     |       | *     | *     |       |       |    |     |       |
|       |                | 25  |             |     |    |     |     |    |    |    |     |     |     |       |       | *     |       |       |    |     |       |
|       |                | 16  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       | X8M * |    |     |       |
| GCM31 | 1206           | 100 |             |     |    |     |     |    |    |    |     |     |     |       | *     |       |       |       |    |     |       |
|       |                | 50  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     |       |
|       |                | 35  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       | X8M * |    |     |       |
|       |                | 25  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     |       |
|       |                | 16  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     |       |
| GCM32 | 1210           | 100 |             |     |    |     |     |    |    |    |     |     |     |       |       | *     |       |       |    |     |       |
|       |                | 50  |             |     |    |     |     |    |    |    |     |     |     |       |       |       | *     |       |    |     |       |
|       |                | 25  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       | *     |    |     |       |
|       |                | 10  |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     |       |
|       |                | 2.5 |             |     |    |     |     |    |    |    |     |     |     |       |       |       |       |       |    |     | X8M * |

\* : Rated voltage derating product

## ※ Rated Voltage Derating Type

When the product temperature exceeds 125° C, please use this product within the voltage and temperature derated conditions in the figure below.



GCM series / <100V Max>

Apr.2024

<X8L,X8M,X8N,X8R,X8G type>

Chip size and Capacitance range

< X8R >

M.P. (Recommend)     Not Recommended

| Type  | Size (inch) | VV  | Capacitance |     |    |     |     |    |    |    |     |     |     |    |
|-------|-------------|-----|-------------|-----|----|-----|-----|----|----|----|-----|-----|-----|----|
|       |             |     | pF          |     | nF |     |     |    |    |    |     |     |     | μF |
|       |             |     | 220         | 470 | 1  | 2.2 | 4.7 | 10 | 22 | 47 | 100 | 220 | 470 | 1  |
| GCM18 | 0603        | 100 |             |     |    |     |     |    |    |    |     |     |     |    |
|       |             | 50  |             |     |    |     |     |    |    |    |     |     |     |    |
|       |             | 25  |             |     |    |     |     |    |    |    |     |     |     |    |
| GCM21 | 0805        | 100 |             |     |    |     |     |    |    |    |     |     |     |    |
|       |             | 50  |             |     |    |     |     |    |    |    |     |     |     |    |
|       |             | 25  |             |     |    |     |     |    |    |    |     |     |     |    |
| GCM31 | 1206        | 50  |             |     |    |     |     |    |    |    |     |     |     |    |
|       |             | 25  |             |     |    |     |     |    |    |    |     |     |     |    |

< X8G >

| Type  | Size (inch) | VV  | Capacitance |    |     |    |   |   |    |    |    |     |     |   |
|-------|-------------|-----|-------------|----|-----|----|---|---|----|----|----|-----|-----|---|
|       |             |     | pF          |    |     | nF |   |   |    |    |    |     |     |   |
|       |             |     | 10          | 22 | 100 | 1  | 2 | 5 | 10 | 22 | 47 | 100 | 220 | 1 |
| GCM15 | 0402        | 50  |             |    |     |    |   |   |    |    |    |     |     |   |
| GCM18 | 0603        | 100 |             |    |     |    |   |   |    |    |    |     |     |   |
|       |             | 50  |             |    |     |    |   |   |    |    |    |     |     |   |
| GCM21 | 0805        | 100 |             |    |     |    |   |   |    |    |    |     |     |   |
|       |             | 50  |             |    |     |    |   |   |    |    |    |     |     |   |
| GCM31 | 1206        | 100 |             |    |     |    |   |   |    |    |    |     |     |   |
|       |             | 50  |             |    |     |    |   |   |    |    |    |     |     |   |

## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;X8L,X8M,X8N,X8R,X8G type&gt;

## Murata P/N List &lt; 0402 size / X8M &gt;

| Size (inch) | Chip T (mm) | TC  | WV     | Cap | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|--------|-----|---------|--------------------|-----------|-----------------|
| 0201        | 0.3+/-0.09  | X8M | 4(*)   | 1μF | +/-20%  | GCM033M8EB105ME08D | Available | Mass Production |
|             | 0.3+/-0.09  | X8M | 2.5(*) | 1μF | +/-20%  | GCM033M8EA105ME08D | Available | Mass Production |

## Murata P/N List &lt; 0402 size / X8L,X8M &gt;

| Size (inch) | Chip T (mm) | TC  | WV     | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|--------|---------|---------|--------------------|-----------|-----------------|
| 0402        | 0.5+/-0.05  | X8L | 50     | 220pF   | +/-10%  | GCM155L81H221KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X8L |        | 470pF   | +/-10%  | GCM155L81H471KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X8L |        | 1,000pF | +/-10%  | GCM155L81H102KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X8L |        | 2,200pF | +/-10%  | GCM155L81H222KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X8L |        | 4,700pF | +/-10%  | GCM155L81H472KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X8L | 50(*)  | 0.047μF | +/-10%  | GCM155L8EH473KE07D | Available | Mass Production |
|             | 0.5+/-0.05  | X8L |        | 0.1μF   | +/-10%  | GCM155L8EH104KE07D | Available | Mass Production |
|             | 0.5+/-0.05  | X8L | 25     | 0.01μF  | +/-10%  | GCM155L81E103KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X8L |        | 0.1μF   | +/-10%  | GCM155L81E104KE02D | Available | Mass Production |
|             | 0.5+/-0.05  | X8L | 16     | 0.022μF | +/-10%  | GCM155L81C223KA37D | Available | Mass Production |
|             | 0.5+/-0.05  | X8L |        | 0.047μF | +/-10%  | GCM155L81C473KA37D | Available | Mass Production |
|             | 0.5+/-0.2   | X8M | 4(*)   | 0.7μF   | +/-20%  | GCM155M8EB475ME08D | Available | Mass Production |
|             | 0.5+/-0.2   | X8M | 2.5(*) | 10μF    | +/-20%  | GCM155M8EA106ME08D | Available | Mass Production |

## Murata P/N List &lt; 0603 size / X8L,X8N &gt;

| Size (inch) | Chip T (mm) | TC  | WV     | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|--------|---------|---------|--------------------|-----------|-----------------|
| 0603        | 0.8+/-0.1   | X8L | 50     | 220pF   | +/-10%  | GCM188L81H221KA03D | Available | Mass Production |
|             | 0.8+/-0.1   | X8L |        | 470pF   | +/-10%  | GCM188L81H471KA03D | Available | Mass Production |
|             | 0.8+/-0.1   | X8L |        | 1000pF  | +/-10%  | GCM188L81H102KA03D | Available | Mass Production |
|             | 0.8+/-0.1   | X8L |        | 2200pF  | +/-10%  | GCM188L81H222KA03D | Available | Mass Production |
|             | 0.8+/-0.1   | X8L |        | 4700pF  | +/-10%  | GCM188L81H472KA03D | Available | Mass Production |
|             | 0.8+/-0.1   | X8L |        | 0.01μF  | +/-10%  | GCM188L81H103KA03D | Available | Mass Production |
|             | 0.8+/-0.1   | X8L |        | 0.022μF | +/-10%  | GCM188L81H223KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8L |        | 0.047μF | +/-10%  | GCM188L81H473KA55D | Available | Mass Production |
|             | 0.8+/-0.1   | X8L |        | 0.1μF   | +/-10%  | GCM188L81H104KA57D | Available | Mass Production |
|             | 0.8+/-0.1   | X8L | 25     | 0.22μF  | +/-10%  | GCM188L81E224KA64D | Available | Mass Production |
|             | 0.8+/-0.1   | X8L | 16     | 0.22μF  | +/-10%  | GCM188L81C224KA37D | Available | Mass Production |
|             | 0.8+/-0.2   | X8N | 2.5(*) | 22μF    | +/-20%  | GCM188N8EA226ME08D | Available | Mass Production |

\* : Rated voltage derating product



## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;X8L,X8M,X8N,X8R,X8G type&gt;

## Murata P/N List &lt; 0805 size / X8L,X8M &gt;

| Size (inch) | Chip T (mm) | TC  | WV    | Cap    | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-------|--------|---------|--------------------|-----------|-----------------|
| 0805        | 1.25+/-0.15 | X8L | 50    | 0.1μF  | +/-10%  | GCM21BL81H104KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X8L |       | 0.22μF | +/-10%  | GCM21BL81H224KA37L | Available | Mass Production |
|             | 1.25+/-0.2  | X8M | 50(*) | 2.2μF  | +/-10%  | GCM21BM8EH225KE08L | Available | Mass Production |
|             | 1.25+/-0.15 | X8L | 35(*) | 2.2μF  | +/-10%  | GCM21BL8EG225KE07L | Available | Mass Production |
|             | 1.25+/-0.2  | X8L |       | 4.7μF  | +/-10%  | GCM21BL8EG475KE08L | Available | Mass Production |
|             | 1.25+/-0.15 | X8L | 25    | 0.47μF | +/-10%  | GCM21BL81E474KA37L | Available | Mass Production |
|             | 1.25+/-0.2  | X8L | 25(*) | 4.7μF  | +/-10%  | GCM21BL8EF475KE08L | Available | Mass Production |
|             | 1.25+/-0.15 | X8L | 16    | 0.47μF | +/-10%  | GCM21BL81C474KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X8L |       | 1μF    | +/-10%  | GCM21BL81C105KA58L | Available | Mass Production |
|             | 1.25+/-0.2  | X8M | 16(*) | 10μF   | +/-10%  | GCM21BM8EE106KE08L | Available | Mass Production |

## Murata P/N List &lt; 1206 size / X8L,X8M &gt;

| Size (inch) | Chip T (mm) | TC  | WV     | Cap    | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|--------|--------|---------|--------------------|-----------|-----------------|
| 1206        | 1.6+/-0.2   | X8L | 100(*) | 2.2μF  | +/-10%  | GCM31CL8EL225KE07L | Available | Mass Production |
|             | 1.15+/-0.1  | X8L | 50     | 0.1μF  | +/-10%  | GCM31ML81H104KA37L | Available | Mass Production |
|             | 1.15+/-0.1  | X8L |        | 0.22μF | +/-10%  | GCM31ML81H224KA37L | Available | Mass Production |
|             | 1.15+/-0.1  | X8L |        | 0.47μF | +/-10%  | GCM31ML81H474KA37L | Available | Mass Production |
|             | 1.6+/-0.2   | X8L |        | 1μF    | +/-10%  | GCM31CL81H105KA55L | Available | Mass Production |
|             | 1.6+/-0.3   | X8M | 35(*)  | 10μF   | +/-10%  | GCM31CM8EG106KE08L | Available | Mass Production |
|             | 1.15+/-0.1  | X8L | 25     | 1μF    | +/-10%  | GCM31ML81E105KA37L | Available | Mass Production |
|             | 1.15+/-0.15 | X8L | 16     | 2.2μF  | +/-10%  | GCM31ML81C225KA54L | Available | Mass Production |

## Murata P/N List &lt; 1210 size / X8L,X8M &gt;

| Size (inch) | Chip T (mm)   | TC  | WV     | Cap   | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|---------------|-----|--------|-------|---------|--------------------|-----------|-----------------|
| 1210        | 2.0+/-0.2     | X8L | 100(*) | 4.7μF | +/-10%  | GCM32DL8EL475KE07L | Available | Mass Production |
|             | 2.5+/-0.2     | X8L | 50(*)  | 10μF  | +/-10%  | GCM32EL8EH106KA07L | Available | Mass Production |
|             | 2.5+0.35/-0.2 | X8L | 25(*)  | 22μF  | +/-10%  | GCM32EL8EF226KE08L | Available | Mass Production |
|             | 2.0+/-0.2     | X8L | 10     | 10μF  | +/-10%  | GCM32DL81A106KA37L | Available | Mass Production |
|             | 2.5+0.35/-0.2 | X8M | 2.5(*) | 220μF | +/-20%  | GCM32EM8EA227ME08L | Available | Mass Production |

\* : Rated voltage derating product

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## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;X8L,X8M,X8N,X8R,X8G type&gt;

## Murata P/N List &lt; 0603 size / X8R &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 0603        | 0.8+/-0.1   | X8R | 100 | 1000pF  | +/-10%  | GCM188R92A102KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8R |     | 2200pF  | +/-10%  | GCM188R92A222KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8R |     | 4700pF  | +/-10%  | GCM188R92A472KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8R |     | 0.01μF  | +/-10%  | GCM188R92A103KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8R | 50  | 1000pF  | +/-10%  | GCM188R91H102KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8R |     | 2200pF  | +/-10%  | GCM188R91H222KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8R |     | 4700pF  | +/-10%  | GCM188R91H472KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8R |     | 0.01μF  | +/-10%  | GCM188R91H103KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8R |     | 0.022μF | +/-10%  | GCM188R91H223KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8R |     | 0.047μF | +/-10%  | GCM188R91H473KA37D | Available | Mass Production |
|             | 0.8+/-0.1   | X8R | 25  | 0.1μF   | +/-10%  | GCM188R91E104KA37D | Available | Mass Production |

## Murata P/N List &lt; 0805 size / X8R &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 0805        | 0.85+/-0.1  | X8R | 100 | 0.01μF  | +/-10%  | GCM219R92A103KA37D | Available | Mass Production |
|             | 0.85+/-0.1  | X8R |     | 0.022μF | +/-10%  | GCM219R92A223KA37D | Available | Mass Production |
|             | 1.25+/-0.15 | X8R |     | 0.047μF | +/-10%  | GCM21BR92A473KA37L | Available | Mass Production |
|             | 0.85+/-0.1  | X8R | 50  | 0.01μF  | +/-10%  | GCM219R91H103KA37D | Available | Mass Production |
|             | 0.85+/-0.1  | X8R |     | 0.022μF | +/-10%  | GCM219R91H223KA37D | Available | Mass Production |
|             | 1.25+/-0.15 | X8R |     | 0.047μF | +/-10%  | GCM21BR91H473KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X8R |     | 0.1μF   | +/-10%  | GCM21BR91H104KA37L | Available | Mass Production |
|             | 1.25+/-0.15 | X8R | 25  | 0.22μF  | +/-10%  | GCM21BR91E224KA37L | Available | Mass Production |

## Murata P/N List &lt; 1206 size / X8R &gt;

| Size (inch) | Chip T (mm) | TC  | WV | Cap    | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|----|--------|---------|--------------------|-----------|-----------------|
| 1206        | 1.15+/-0.1  | X8R | 50 | 0.22μF | +/-10%  | GCM31MR91H224KA37L | Available | Mass Production |
|             | 1.6+/-0.2   | X8R |    | 0.47μF | +/-10%  | GCM31CR91H474KA37L | Available | Mass Production |
|             | 1.15+/-0.1  | X8R | 25 | 0.47μF | +/-10%  | GCM31MR91E474KA37L | Available | Mass Production |
|             | 1.6+/-0.2   | X8R |    | 1μF    | +/-10%  | GCM31CR91E105KA37L | Available | Mass Production |

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4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.

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## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;X8L,X8M,X8N,X8R,X8G type&gt;

## Murata P/N List &lt; 0402 size / X8G &gt;

| Size (inch) | Chip T (mm) | TC  | WV | Cap     | Cap Tol   | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|----|---------|-----------|--------------------|-----------|-----------------|
| 0402        | 0.5+/-0.05  | X8G | 50 | 1pF     | +/-0.25pF | GCM1555G1H1R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 2pF     | +/-0.25pF | GCM1555G1H2R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 3pF     | +/-0.25pF | GCM1555G1H3R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 4pF     | +/-0.25pF | GCM1555G1H4R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 5pF     | +/-0.25pF | GCM1555G1H5R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 6pF     | +/-0.25pF | GCM1555G1H6R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 7pF     | +/-0.25pF | GCM1555G1H7R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 8pF     | +/-0.25pF | GCM1555G1H8R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 9pF     | +/-0.25pF | GCM1555G1H9R0CA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 10pF    | +/-5%     | GCM1555G1H100JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 15pF    | +/-5%     | GCM1555G1H150JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 22pF    | +/-5%     | GCM1555G1H220JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 33pF    | +/-5%     | GCM1555G1H330JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 47pF    | +/-5%     | GCM1555G1H470JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 68pF    | +/-5%     | GCM1555G1H680JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 100pF   | +/-5%     | GCM1555G1H101JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 150pF   | +/-5%     | GCM1555G1H151JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 220pF   | +/-5%     | GCM1555G1H221JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 330pF   | +/-5%     | GCM1555G1H331JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 470pF   | +/-5%     | GCM1555G1H471JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 680pF   | +/-5%     | GCM1555G1H681JA16D | Available | Mass Production |
|             | 0.5+/-0.05  | X8G |    | 1,000pF | +/-5%     | GCM1555G1H102JA16D | Available | Mass Production |

1) “\*\*” of under development P/N have not fixed yet.

2) Q1 = January to March, Q2 = April to June, Q3 = July to September, Q4 = October to December

3) This is muRata's development schedule, which may change due to progress of each development works.

4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.

5) Sample marked “-” in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.

## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;X8L,X8M,X8N,X8R,X8G type&gt;

## Murata P/N List &lt; 0603 size / X8G &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol   | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|-----------|--------------------|-----------|-----------------|
| 0603        | 0.8+/-0.1   | X8G | 100 | 10pF    | +/-5%     | GCM1885G2A100JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 15pF    | +/-5%     | GCM1885G2A150JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 22pF    | +/-5%     | GCM1885G2A220JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 33pF    | +/-5%     | GCM1885G2A330JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 47pF    | +/-5%     | GCM1885G2A470JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 68pF    | +/-5%     | GCM1885G2A680JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 100pF   | +/-5%     | GCM1885G2A101JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 150pF   | +/-5%     | GCM1885G2A151JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 220pF   | +/-5%     | GCM1885G2A221JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 330pF   | +/-5%     | GCM1885G2A331JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 470pF   | +/-5%     | GCM1885G2A471JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 680pF   | +/-5%     | GCM1885G2A681JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 1,000pF | +/-5%     | GCM1885G2A102JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G | 50  | 1pF     | +/-0.25pF | GCM1885G1H1R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 2pF     | +/-0.25pF | GCM1885G1H2R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 3pF     | +/-0.25pF | GCM1885G1H3R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 4pF     | +/-0.25pF | GCM1885G1H4R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 5pF     | +/-0.25pF | GCM1885G1H5R0CA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 6pF     | +/-0.5pF  | GCM1885G1H6R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 7pF     | +/-0.5pF  | GCM1885G1H7R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 8pF     | +/-0.5pF  | GCM1885G1H8R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 9pF     | +/-0.5pF  | GCM1885G1H9R0DA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 10pF    | +/-5%     | GCM1885G1H100JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 15pF    | +/-5%     | GCM1885G1H150JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 22pF    | +/-5%     | GCM1885G1H220JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 33pF    | +/-5%     | GCM1885G1H330JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 47pF    | +/-5%     | GCM1885G1H470JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 68pF    | +/-5%     | GCM1885G1H680JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 100pF   | +/-5%     | GCM1885G1H101JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 150pF   | +/-5%     | GCM1885G1H151JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 220pF   | +/-5%     | GCM1885G1H221JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 330pF   | +/-5%     | GCM1885G1H331JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 470pF   | +/-5%     | GCM1885G1H471JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 680pF   | +/-5%     | GCM1885G1H681JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 1,000pF | +/-5%     | GCM1885G1H102JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 1,500pF | +/-5%     | GCM1885G1H152JA16D | Available | Mass Production |
|             | 0.8+/-0.1   | X8G |     | 2,200pF | +/-5%     | GCM1885G1H222JA16D | Available | Mass Production |

## GCM series / &lt;100V Max&gt;

Apr.2024

## &lt;X8L,X8M,X8N,X8R,X8G type&gt;

## Murata P/N List &lt; 0805 size / X8G &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 0805        | 0.6+/-0.1   | X8G | 100 | 100pF   | +/-5%   | GCM2165G2A101JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 150pF   | +/-5%   | GCM2165G2A151JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 220pF   | +/-5%   | GCM2165G2A221JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 330pF   | +/-5%   | GCM2165G2A331JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 470pF   | +/-5%   | GCM2165G2A471JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 680pF   | +/-5%   | GCM2165G2A681JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 1,000pF | +/-5%   | GCM2195G2A102JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 1,500pF | +/-5%   | GCM2195G2A152JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G | 50  | 100pF   | +/-5%   | GCM2165G1H101JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 150pF   | +/-5%   | GCM2165G1H151JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 220pF   | +/-5%   | GCM2165G1H221JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 330pF   | +/-5%   | GCM2165G1H331JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 470pF   | +/-5%   | GCM2165G1H471JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 680pF   | +/-5%   | GCM2165G1H681JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 1,000pF | +/-5%   | GCM2165G1H102JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 1,500pF | +/-5%   | GCM2165G1H152JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 2,200pF | +/-5%   | GCM2165G1H222JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 3,300pF | +/-5%   | GCM2165G1H332JA16D | Available | Mass Production |
|             | 0.6+/-0.1   | X8G |     | 4,700pF | +/-5%   | GCM2165G1H472JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 6,800pF | +/-5%   | GCM2195G1H682JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 0.01μF  | +/-5%   | GCM2195G1H103JA16D | Available | Mass Production |

## Murata P/N List &lt; 1206 size / X8G &gt;

| Size (inch) | Chip T (mm) | TC  | WV  | Cap     | Cap Tol | Murata Global P/N  | Sample    | M.P.            |
|-------------|-------------|-----|-----|---------|---------|--------------------|-----------|-----------------|
| 1206        | 0.85+/-0.1  | X8G | 100 | 1,000pF | +/-5%   | GCM3195G2A102JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 1,500pF | +/-5%   | GCM3195G2A152JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 2,200pF | +/-5%   | GCM3195G2A222JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 3,300pF | +/-5%   | GCM3195G2A332JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 4,700pF | +/-5%   | GCM3195G2A472JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 1,000pF | +/-5%   | GCM3195G1H102JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G | 50  | 1,500pF | +/-5%   | GCM3195G1H152JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 2,200pF | +/-5%   | GCM3195G1H222JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 3,300pF | +/-5%   | GCM3195G1H332JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 4,700pF | +/-5%   | GCM3195G1H472JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 6,800pF | +/-5%   | GCM3195G1H682JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 0.01μF  | +/-5%   | GCM3195G1H103JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 0.015μF | +/-5%   | GCM3195G1H153JA16D | Available | Mass Production |
|             | 0.85+/-0.1  | X8G |     | 0.022μF | +/-5%   | GCM3195G1H223JA16D | Available | Mass Production |



GCM series<More than DC250V>

Features

- 1.AEC-Q 200 correspondence.
- 2.External electrodes are plated with Sn to improve solderability.
- 3.Size 31 and smaller are compatible with flow and reflow soldering. Size 32 and above are available for reflow soldering only.
- 4.It is suitable for high pulse applications.

Global Part Numbering

|     |     |     |     |     |     |     |     |     |      |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| GC  | M   | 21  | A   | 5C  | 2E  | 100 | J   | X01 | D    |
| -1- | -2- | -3- | -4- | -5- | -6- | -7- | -8- | -9- | -10- |

-1-: Product ID

| Code | Product             |
|------|---------------------|
| GC   | MLCC for Automotive |

-2-: Series

| Code | Product                |
|------|------------------------|
| M    | Tin Plated Termination |

-3-: Dimension (LxW)

| Code | Dimension (LxW)      |
|------|----------------------|
| 21   | 2.0×1.25mm(EIA:0805) |
| 31   | 3.2×1.6mm(EIA:1206)  |
| 32   | 3.2×2.5mm(EIA:1210)  |
| 43   | 4.5×3.2mm(EIA:1812)  |
| 55   | 5.7×5.0mm(EIA:2220)  |

-4-: Dimension (T)

| Code | Dimension (T) |
|------|---------------|
| A    | 1.0mm         |
| B    | 1.25mm        |
| Q    | 1.5mm         |
| C    | 1.6mm         |
| D    | 2.0mm         |
| E    | 2.5mm         |

-5-: Temperature Characteristics

| Code | TC  | Temp. Range | Cap. Change or Temp. Coefficient | Operating Temp. |
|------|-----|-------------|----------------------------------|-----------------|
| 5C   | CG  | 25~125℃     | 0±30ppm/℃                        | -55~125℃        |
| 7U   | U2J | 25~125℃     | -750±120ppm/℃                    |                 |

-6-: Rated Voltage

| Code | Rated Voltage |
|------|---------------|
| 2E   | DC 250V       |
| 2J   | DC 630V       |
| 3A   | DC 1kV        |

-7-: Capacitance

| Code | Capacitance |
|------|-------------|
| 1R0  | 1pF         |
| 100  | 10pF        |
| 101  | 100pF       |
| 102  | 1nF         |
| 103  | 10nF        |

-8-: Capacitance Tolerance

| Code | Cap. Tol. |
|------|-----------|
| J    | ±5%       |

-9-: Individual Specification Code

-10-: Packaging

| Code | Packaging              |
|------|------------------------|
| D    | Φ180mm Paper Taping    |
| L    | Φ180mm Embossed Taping |
| J    | Φ330mm Paper Taping    |
| K    | Φ330mm Embossed Taping |



GCM series/DC250V~1kV/C0G Char.

Features

- 1.AEC-Q 200 correspondence.
- 2.It has low loss and is suitable for high frequency circuits such as resonant circuits.
- 3.Support for AEC-Q 200.
- 4.Size 31 and smaller are compatible with flow and reflow soldering. Size 32 and above are available for reflow soldering only.
- 5.Ideal use for DC-DC converters and power snubbers.

Chip size and Capacitance range

< Temperature Compensating Type C0G, Rated Volt. DC250V/DC630V/DC1kV>

Mass Production

| TC  | WV    | Size | Capacitance |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |  |
|-----|-------|------|-------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|--|
|     |       |      | pF          |    |    |    |    |    |     |     |     |     |     |     | nF  |     |     |     |     |     |    |    |    |    |    |  |
|     |       |      | 10          | 15 | 22 | 33 | 47 | 68 | 100 | 150 | 220 | 330 | 470 | 680 | 1.0 | 1.5 | 2.2 | 3.3 | 4.7 | 6.8 | 82 | 10 | 15 | 22 | 33 |  |
| C0G | 250V  | 0805 |             |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |  |
|     |       | 1206 |             |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |  |
|     | 630V  | 0805 |             |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |  |
|     |       | 1206 |             |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |  |
|     |       | 1210 |             |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |  |
|     | 1000V | 1206 |             |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |  |
|     |       | 1210 |             |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |  |

1) "\*" of under development P/N have not fixed yet.  
2) Q1 = January to March, Q2 = April to June, Q3 = July to September, Q4 = October to December  
3) This is muRata's development schedule, which may change due to progress of each development works.  
4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.  
5) Sample marked "-" in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.

Apr.2024

## GCM series/DC250V/C0G Char.

### < Rated Volt. DC250V , Size 0805 >

| Size | Dimension<br>LxW<br>(mm) | Dimension<br>T<br>(mm) | TC  | WV   | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------------|------------------------|-----|------|-------|---------|--------------------|-----------------|
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 10pF  | +/-5%   | GCM21A5C2E100JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 12pF  | +/-5%   | GCM21A5C2E120JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 15pF  | +/-5%   | GCM21A5C2E150JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 18pF  | +/-5%   | GCM21A5C2E180JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 22pF  | +/-5%   | GCM21A5C2E220JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 27pF  | +/-5%   | GCM21A5C2E270JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 33pF  | +/-5%   | GCM21A5C2E330JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 39pF  | +/-5%   | GCM21A5C2E390JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 47pF  | +/-5%   | GCM21A5C2E470JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 56pF  | +/-5%   | GCM21A5C2E560JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 68pF  | +/-5%   | GCM21A5C2E680JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 82pF  | +/-5%   | GCM21A5C2E820JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 100pF | +/-5%   | GCM21A5C2E101JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 120pF | +/-5%   | GCM21A5C2E121JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 150pF | +/-5%   | GCM21A5C2E151JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 180pF | +/-5%   | GCM21A5C2E181JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 220pF | +/-5%   | GCM21A5C2E221JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 270pF | +/-5%   | GCM21A5C2E271JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 330pF | +/-5%   | GCM21A5C2E331JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 390pF | +/-5%   | GCM21A5C2E391JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 470pF | +/-5%   | GCM21A5C2E471JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 560pF | +/-5%   | GCM21A5C2E561JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 680pF | +/-5%   | GCM21A5C2E681JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 820pF | +/-5%   | GCM21A5C2E821JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 1.0nF | +/-5%   | GCM21A5C2E102JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 1.2nF | +/-5%   | GCM21A5C2E122JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 1.5nF | +/-5%   | GCM21A5C2E152JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 1.8nF | +/-5%   | GCM21A5C2E182JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 2.2nF | +/-5%   | GCM21A5C2E222JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 250V | 2.7nF | +/-5%   | GCM21A5C2E272JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 250V | 3.3nF | +/-5%   | GCM21B5C2E332JX01L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 250V | 3.9nF | +/-5%   | GCM21B5C2E392JX01L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 250V | 4.7nF | +/-5%   | GCM21B5C2E472JX01L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 250V | 5.6nF | +/-5%   | GCM21B5C2E562JX0AL | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 250V | 6.8nF | +/-5%   | GCM21B5C2E682JX0AL | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 250V | 8.2nF | +/-5%   | GCM21B5C2E822JX0AL | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 250V | 10nF  | +/-5%   | GCM21B5C2E103JX0AL | Mass Production |

### < Rated Volt. DC250V , Size 1206 >

| Size | Dimension<br>LxW<br>(mm) | Dimension<br>T<br>(mm) | TC  | WV   | Cap  | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------------|------------------------|-----|------|------|---------|--------------------|-----------------|
| 1206 | 3.2 x 1.6                | 1.25                   | C0G | 250V | 12nF | +/-5%   | GCM31B5C2E123JX01L | Mass Production |
| 1206 | 3.2 x 1.6                | 1.60                   | C0G | 250V | 15nF | +/-5%   | GCM31C5C2E153JX03L | Mass Production |
| 1206 | 3.2 x 1.6                | 1.60                   | C0G | 250V | 18nF | +/-5%   | GCM31C5C2E183JX03L | Mass Production |
| 1206 | 3.2 x 1.6                | 1.60                   | C0G | 250V | 22nF | +/-5%   | GCM31C5C2E223JX03L | Mass Production |

1) "\*" of under development P/N have not fixed yet.

2) Q1 = January to March, Q2 = April to June, Q3 = July to September, Q4 = October to December

3) This is muRata's development schedule, which may change due to progress of each development works.

4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.

5) Sample marked "-" in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.

GCM series/DC630V/C0G Char.

< Rated Volt. DC630V , Size 0805 >

| Size | Dimension<br>LxW<br>(mm) | Dimension<br>T<br>(mm) | TC  | WV   | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------------|------------------------|-----|------|-------|---------|--------------------|-----------------|
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 10pF  | +/-5%   | GCM21A5C2J100JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 12pF  | +/-5%   | GCM21A5C2J120JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 15pF  | +/-5%   | GCM21A5C2J150JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 18pF  | +/-5%   | GCM21A5C2J180JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 22pF  | +/-5%   | GCM21A5C2J220JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 27pF  | +/-5%   | GCM21A5C2J270JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 33pF  | +/-5%   | GCM21A5C2J330JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 39pF  | +/-5%   | GCM21A5C2J390JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 47pF  | +/-5%   | GCM21A5C2J470JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 56pF  | +/-5%   | GCM21A5C2J560JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 68pF  | +/-5%   | GCM21A5C2J680JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 82pF  | +/-5%   | GCM21A5C2J820JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 100pF | +/-5%   | GCM21A5C2J101JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 120pF | +/-5%   | GCM21A5C2J121JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 150pF | +/-5%   | GCM21A5C2J151JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 180pF | +/-5%   | GCM21A5C2J181JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 220pF | +/-5%   | GCM21A5C2J221JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 270pF | +/-5%   | GCM21A5C2J271JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 330pF | +/-5%   | GCM21A5C2J331JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 390pF | +/-5%   | GCM21A5C2J391JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 470pF | +/-5%   | GCM21A5C2J471JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | C0G | 630V | 560pF | +/-5%   | GCM21A5C2J561JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 630V | 680pF | +/-5%   | GCM21B5C2J681JX03L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 630V | 820pF | +/-5%   | GCM21B5C2J821JX03L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 630V | 1.0nF | +/-5%   | GCM21B5C2J102JX03L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 630V | 1.2nF | +/-5%   | GCM21B5C2J122JX03L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 630V | 1.5nF | +/-5%   | GCM21B5C2J152JX0AL | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 630V | 1.8nF | +/-5%   | GCM21B5C2J182JX0AL | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | C0G | 630V | 2.2nF | +/-5%   | GCM21B5C2J222JX0AL | Mass Production |

1) "\*" of under development P/N have not fixed yet.  
2) Q1 = January to March, Q2 = April to June, Q3 = July to September, Q4 = October to December  
3) This is muRata's development schedule, which may change due to progress of each development works.  
4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.  
5) Sample marked "-" in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.

GCM series/DC630V/C0G Char.

< Rated Volt. DC630V , Size 1206 >

| Size | Dimension LxW (mm) | Dimension T (mm) | TC  | WV   | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------|------------------|-----|------|-------|---------|--------------------|-----------------|
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 10pF  | +/-5%   | GCM31A5C2J100JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 12pF  | +/-5%   | GCM31A5C2J120JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 15pF  | +/-5%   | GCM31A5C2J150JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 18pF  | +/-5%   | GCM31A5C2J180JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 22pF  | +/-5%   | GCM31A5C2J220JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 27pF  | +/-5%   | GCM31A5C2J270JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 33pF  | +/-5%   | GCM31A5C2J330JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 39pF  | +/-5%   | GCM31A5C2J390JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 47pF  | +/-5%   | GCM31A5C2J470JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 56pF  | +/-5%   | GCM31A5C2J560JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 68pF  | +/-5%   | GCM31A5C2J680JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 82pF  | +/-5%   | GCM31A5C2J820JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 100pF | +/-5%   | GCM31A5C2J101JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 120pF | +/-5%   | GCM31A5C2J121JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 150pF | +/-5%   | GCM31A5C2J151JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 180pF | +/-5%   | GCM31A5C2J181JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 220pF | +/-5%   | GCM31A5C2J221JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 270pF | +/-5%   | GCM31A5C2J271JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 330pF | +/-5%   | GCM31A5C2J331JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 390pF | +/-5%   | GCM31A5C2J391JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 470pF | +/-5%   | GCM31A5C2J471JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 560pF | +/-5%   | GCM31A5C2J561JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 680pF | +/-5%   | GCM31A5C2J681JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 820pF | +/-5%   | GCM31A5C2J821JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 1.0nF | +/-5%   | GCM31A5C2J102JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 1.2nF | +/-5%   | GCM31A5C2J122JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 1.5nF | +/-5%   | GCM31A5C2J152JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 630V | 1.8nF | +/-5%   | GCM31A5C2J182JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.25             | C0G | 630V | 2.2nF | +/-5%   | GCM31B5C2J222JX01L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.25             | C0G | 630V | 2.7nF | +/-5%   | GCM31B5C2J272JX01L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | C0G | 630V | 3.3nF | +/-5%   | GCM31C5C2J332JX03L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | C0G | 630V | 3.9nF | +/-5%   | GCM31C5C2J392JX03L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | C0G | 630V | 4.7nF | +/-5%   | GCM31C5C2J472JX03L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | C0G | 630V | 5.6nF | +/-5%   | GCM31C5C2J562JX03L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | C0G | 630V | 6.8nF | +/-5%   | GCM31C5C2J682JX03L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | C0G | 630V | 8.2nF | +/-5%   | GCM31C5C2J822JX03L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | C0G | 630V | 10nF  | +/-5%   | GCM31C5C2J103JX03L | Mass Production |

< Rated Volt. DC630V , Size 1210 >

| Size | Dimension LxW (mm) | Dimension T (mm) | TC  | WV   | Cap  | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------|------------------|-----|------|------|---------|--------------------|-----------------|
| 1210 | 3.2 x 2.5          | 2.00             | C0G | 630V | 12nF | +/-5%   | GCM32D5C2J123JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.00             | C0G | 630V | 15nF | +/-5%   | GCM32D5C2J153JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.00             | C0G | 630V | 18nF | +/-5%   | GCM32D5C2J183JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.50             | C0G | 630V | 22nF | +/-5%   | GCM32E5C2J223JX03L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.50             | C0G | 630V | 27nF | +/-5%   | GCM32E5C2J273JX03L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.50             | C0G | 630V | 33nF | +/-5%   | GCM32E5C2J333JX0AL | Mass Production |

## GCM series/DC1kV/C0G Char.

### < Rated Volt. DC1kV , Size 1206 >

| Size | Dimension LxW (mm) | Dimension T (mm) | TC  | WV  | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------|------------------|-----|-----|-------|---------|--------------------|-----------------|
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 10pF  | +/-5%   | GCM31A5C3A100JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 12pF  | +/-5%   | GCM31A5C3A120JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 15pF  | +/-5%   | GCM31A5C3A150JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 18pF  | +/-5%   | GCM31A5C3A180JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 22pF  | +/-5%   | GCM31A5C3A220JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 27pF  | +/-5%   | GCM31A5C3A270JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 33pF  | +/-5%   | GCM31A5C3A330JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 39pF  | +/-5%   | GCM31A5C3A390JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 47pF  | +/-5%   | GCM31A5C3A470JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 56pF  | +/-5%   | GCM31A5C3A560JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 68pF  | +/-5%   | GCM31A5C3A680JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 82pF  | +/-5%   | GCM31A5C3A820JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 100pF | +/-5%   | GCM31A5C3A101JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 120pF | +/-5%   | GCM31A5C3A121JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 150pF | +/-5%   | GCM31A5C3A151JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 180pF | +/-5%   | GCM31A5C3A181JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 220pF | +/-5%   | GCM31A5C3A221JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 270pF | +/-5%   | GCM31A5C3A271JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 330pF | +/-5%   | GCM31A5C3A331JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 390pF | +/-5%   | GCM31A5C3A391JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | C0G | 1kV | 470pF | +/-5%   | GCM31A5C3A471JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.25             | C0G | 1kV | 560pF | +/-5%   | GCM31B5C3A561JX01L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.25             | C0G | 1kV | 680pF | +/-5%   | GCM31B5C3A681JX01L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | C0G | 1kV | 820pF | +/-5%   | GCM31C5C3A821JX03L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | C0G | 1kV | 1.0nF | +/-5%   | GCM31C5C3A102JX03L | Mass Production |

### < Rated Volt. DC1kV , Size 1210 >

| Size | Dimension LxW (mm) | Dimension T (mm) | TC  | WV  | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------|------------------|-----|-----|-------|---------|--------------------|-----------------|
| 1210 | 3.2 x 2.5          | 2.00             | C0G | 1kV | 4.7nF | +/-5%   | GCM32D5C3A472JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.00             | C0G | 1kV | 5.6nF | +/-5%   | GCM32D5C3A562JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.00             | C0G | 1kV | 6.8nF | +/-5%   | GCM32D5C3A682JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.00             | C0G | 1kV | 8.2nF | +/-5%   | GCM32D5C3A822JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.50             | C0G | 1kV | 10nF  | +/-5%   | GCM32E5C3A103JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.50             | C0G | 1kV | 12nF  | +/-5%   | GCM32E5C3A123JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.50             | C0G | 1kV | 15nF  | +/-5%   | GCM32E5C3A153JX0AL | Mass Production |
| 1210 | 3.2 x 2.5          | 2.50             | C0G | 1kV | 18nF  | +/-5%   | GCM32E5C3A183JX0AL | Mass Production |
| 1210 | 3.2 x 2.5          | 2.50             | C0G | 1kV | 22nF  | +/-5%   | GCM32E5C3A223JX0AL | Mass Production |

1) "\*" of under development P/N have not fixed yet.

2) Q1 = January to March, Q2 = April to June, Q3 = July to September, Q4 = October to December

3) This is muRata's development schedule, which may change due to progress of each development works.

4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.

5) Sample marked "-" in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.

GCM series /DC250V~1kV/U2J Char.

Features

- 1.It has low loss and is suitable for high frequency circuits.
- 2.AEC-Q 200 correspondence.
- 3.Size 31 and smaller are compatible with flow and reflow soldering. Size 32 and above are available for reflow soldering only.
- 4.It is suitable for high pulse applications.

Chip size and Capacitance range

< Temperature Compensating Type U2J, Rated Volt. DC250V/DC630V/DC1kV>

Mass production

| TC  | WV    | Size | Capacitance |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |
|-----|-------|------|-------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|
|     |       |      | pF          |    |    |    |    |    |     |     |     |     |     |     | nF |     |     |     |     |     |     |     |    |    |    |    |    |    |
|     |       |      | 10          | 15 | 22 | 33 | 47 | 68 | 100 | 150 | 220 | 330 | 470 | 680 | 1  | 1.5 | 2.2 | 3.3 | 4.7 | 5.6 | 6.8 | 8.2 | 10 | 15 | 22 | 27 | 33 | 47 |
| U2J | 250V  | 0805 |             |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |
|     |       | 1206 |             |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |
|     | 630V  | 1206 |             |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |
|     |       | 1210 |             |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |
|     |       | 1812 |             |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |
|     |       | 2220 |             |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |
|     | 1000V | 1206 |             |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |
|     |       | 1210 |             |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |
|     |       | 1812 |             |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |
|     |       | 2220 |             |    |    |    |    |    |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |    |    |    |    |

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4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.  
5) Sample marked "-" in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.



GCM series/DC250V/U2J Char.

< Rated Volt. DC250V , Size 0805 >

| Size | Dimension<br>LxW<br>(mm) | Dimension<br>T<br>(mm) | TC  | WV   | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------------|------------------------|-----|------|-------|---------|--------------------|-----------------|
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 100pF | +/-5%   | GCM21A7U2E101JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 120pF | +/-5%   | GCM21A7U2E121JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 150pF | +/-5%   | GCM21A7U2E151JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 180pF | +/-5%   | GCM21A7U2E181JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 220pF | +/-5%   | GCM21A7U2E221JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 270pF | +/-5%   | GCM21A7U2E271JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 330pF | +/-5%   | GCM21A7U2E331JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 390pF | +/-5%   | GCM21A7U2E391JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 470pF | +/-5%   | GCM21A7U2E471JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 560pF | +/-5%   | GCM21A7U2E561JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 680pF | +/-5%   | GCM21A7U2E681JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 820pF | +/-5%   | GCM21A7U2E821JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 1.0nF | +/-5%   | GCM21A7U2E102JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 1.2nF | +/-5%   | GCM21A7U2E122JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 1.5nF | +/-5%   | GCM21A7U2E152JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 1.8nF | +/-5%   | GCM21A7U2E182JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.00                   | U2J | 250V | 2.2nF | +/-5%   | GCM21A7U2E222JX01D | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | U2J | 250V | 2.7nF | +/-5%   | GCM21B7U2E272JX03L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | U2J | 250V | 3.3nF | +/-5%   | GCM21B7U2E332JX03L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | U2J | 250V | 3.9nF | +/-5%   | GCM21B7U2E392JX03L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | U2J | 250V | 4.7nF | +/-5%   | GCM21B7U2E472JX03L | Mass Production |
| 0805 | 2.0 x 1.25               | 1.25                   | U2J | 250V | 5.6nF | +/-5%   | GCM21B7U2E562JX03L | Mass Production |

< Rated Volt. DC250V , Size 1206 >

| Size | Dimension<br>LxW<br>(mm) | Dimension<br>T<br>(mm) | TC  | WV   | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------------|------------------------|-----|------|-------|---------|--------------------|-----------------|
| 1206 | 3.2 x 1.6                | 1.25                   | U2J | 250V | 6.8nF | +/-5%   | GCM31B7U2E682JX01L | Mass Production |
| 1206 | 3.2 x 1.6                | 1.25                   | U2J | 250V | 8.2nF | +/-5%   | GCM31B7U2E822JX01L | Mass Production |
| 1206 | 3.2 x 1.6                | 1.25                   | U2J | 250V | 10nF  | +/-5%   | GCM31B7U2E103JX01L | Mass Production |

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3) This is muRata’s development schedule, which may change due to progress of each development works.  
4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer’s drawing.  
5) Sample marked “-” in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.

GCM series/DC630V/U2J Char.

< Rated Volt. DC630V , Size 1206 >

| Size | Dimension<br>LxW<br>(mm) | Dimension<br>T<br>(mm) | TC  | WV   | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------------|------------------------|-----|------|-------|---------|--------------------|-----------------|
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 10pF  | +/-5%   | GCM31A7U2J100JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 12pF  | +/-5%   | GCM31A7U2J120JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 15pF  | +/-5%   | GCM31A7U2J150JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 18pF  | +/-5%   | GCM31A7U2J180JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 22pF  | +/-5%   | GCM31A7U2J220JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 27pF  | +/-5%   | GCM31A7U2J270JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 33pF  | +/-5%   | GCM31A7U2J330JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 39pF  | +/-5%   | GCM31A7U2J390JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 47pF  | +/-5%   | GCM31A7U2J470JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 56pF  | +/-5%   | GCM31A7U2J560JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 68pF  | +/-5%   | GCM31A7U2J680JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 82pF  | +/-5%   | GCM31A7U2J820JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 100pF | +/-5%   | GCM31A7U2J101JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 120pF | +/-5%   | GCM31A7U2J121JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 150pF | +/-5%   | GCM31A7U2J151JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 180pF | +/-5%   | GCM31A7U2J181JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 220pF | +/-5%   | GCM31A7U2J221JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 270pF | +/-5%   | GCM31A7U2J271JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 330pF | +/-5%   | GCM31A7U2J331JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 390pF | +/-5%   | GCM31A7U2J391JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 470pF | +/-5%   | GCM31A7U2J471JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 560pF | +/-5%   | GCM31A7U2J561JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 680pF | +/-5%   | GCM31A7U2J681JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 820pF | +/-5%   | GCM31A7U2J821JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 1.0nF | +/-5%   | GCM31A7U2J102JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 1.2nF | +/-5%   | GCM31A7U2J122JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 1.5nF | +/-5%   | GCM31A7U2J152JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 1.8nF | +/-5%   | GCM31A7U2J182JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.00                   | U2J | 630V | 2.2nF | +/-5%   | GCM31A7U2J222JX01D | Mass Production |
| 1206 | 3.2 x 1.6                | 1.25                   | U2J | 630V | 2.7nF | +/-5%   | GCM31B7U2J272JX01L | Mass Production |
| 1206 | 3.2 x 1.6                | 1.25                   | U2J | 630V | 3.3nF | +/-5%   | GCM31B7U2J332JX01L | Mass Production |
| 1206 | 3.2 x 1.6                | 1.60                   | U2J | 630V | 3.9nF | +/-5%   | GCM31C7U2J392JX03L | Mass Production |
| 1206 | 3.2 x 1.6                | 1.60                   | U2J | 630V | 4.7nF | +/-5%   | GCM31C7U2J472JX03L | Mass Production |

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3) This is muRata's development schedule, which may change due to progress of each development works.  
4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.  
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Apr.2024

## GCM series/DC630V/U2J Char.

### < Rated Volt. DC630V , Size 1210 >

| Size | Dimension<br>LxW<br>(mm) | Dimension<br>T<br>(mm) | TC  | WV   | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------------|------------------------|-----|------|-------|---------|--------------------|-----------------|
| 1210 | 3.2 x 2.5                | 1.00                   | U2J | 630V | 1.2nF | +/-5%   | GCM32A7U2J122JX01D | Mass Production |
| 1210 | 3.2 x 2.5                | 1.00                   | U2J | 630V | 1.5nF | +/-5%   | GCM32A7U2J152JX01D | Mass Production |
| 1210 | 3.2 x 2.5                | 1.00                   | U2J | 630V | 1.8nF | +/-5%   | GCM32A7U2J182JX01D | Mass Production |
| 1210 | 3.2 x 2.5                | 1.00                   | U2J | 630V | 2.2nF | +/-5%   | GCM32A7U2J222JX01D | Mass Production |
| 1210 | 3.2 x 2.5                | 1.25                   | U2J | 630V | 5.6nF | +/-5%   | GCM32B7U2J562JX01L | Mass Production |
| 1210 | 3.2 x 2.5                | 1.50                   | U2J | 630V | 6.8nF | +/-5%   | GCM32Q7U2J682JX01L | Mass Production |
| 1210 | 3.2 x 2.5                | 2.00                   | U2J | 630V | 8.2nF | +/-5%   | GCM32D7U2J822JX01L | Mass Production |
| 1210 | 3.2 x 2.5                | 2.00                   | U2J | 630V | 10nF  | +/-5%   | GCM32D7U2J103JX01L | Mass Production |

### < Rated Volt. DC630V , Size 1812 >

| Size | Dimension<br>LxW<br>(mm) | Dimension<br>T<br>(mm) | TC  | WV   | Cap  | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------------|------------------------|-----|------|------|---------|--------------------|-----------------|
| 1812 | 4.5 x 3.2                | 1.50                   | U2J | 630V | 12nF | +/-5%   | GCM43Q7U2J123JX01L | Mass Production |
| 1812 | 4.5 x 3.2                | 2.00                   | U2J | 630V | 15nF | +/-5%   | GCM43D7U2J153JX01L | Mass Production |
| 1812 | 4.5 x 3.2                | 2.00                   | U2J | 630V | 18nF | +/-5%   | GCM43D7U2J183JX01L | Mass Production |
| 1812 | 4.5 x 3.2                | 2.00                   | U2J | 630V | 22nF | +/-5%   | GCM43D7U2J223JX01L | Mass Production |

### < Rated Volt. DC630V , Size 2220 >

| Size | Dimension<br>LxW<br>(mm) | Dimension<br>T<br>(mm) | TC  | WV   | Cap  | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------------|------------------------|-----|------|------|---------|--------------------|-----------------|
| 2220 | 5.7 x 5.0                | 1.50                   | U2J | 630V | 27nF | +/-5%   | GCM55Q7U2J273JX01L | Mass Production |
| 2220 | 5.7 x 5.0                | 2.00                   | U2J | 630V | 33nF | +/-5%   | GCM55D7U2J333JX01L | Mass Production |
| 2220 | 5.7 x 5.0                | 2.00                   | U2J | 630V | 39nF | +/-5%   | GCM55D7U2J393JX01L | Mass Production |
| 2220 | 5.7 x 5.0                | 2.00                   | U2J | 630V | 47nF | +/-5%   | GCM55D7U2J473JX01L | Mass Production |

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3) This is muRata's development schedule, which may change due to progress of each development works.

4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.

5) Sample marked "-" in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.

GCM series/DC1kV/U2J Char.

< Rated Volt. DC1kV , Size 1206 >

| Size | Dimension LxW (mm) | Dimension T (mm) | TC  | WV  | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------|------------------|-----|-----|-------|---------|--------------------|-----------------|
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 10pF  | +/-5%   | GCM31A7U3A100JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 12pF  | +/-5%   | GCM31A7U3A120JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 15pF  | +/-5%   | GCM31A7U3A150JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 18pF  | +/-5%   | GCM31A7U3A180JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 22pF  | +/-5%   | GCM31A7U3A220JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 27pF  | +/-5%   | GCM31A7U3A270JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 33pF  | +/-5%   | GCM31A7U3A330JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 39pF  | +/-5%   | GCM31A7U3A390JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 47pF  | +/-5%   | GCM31A7U3A470JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 56pF  | +/-5%   | GCM31A7U3A560JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 68pF  | +/-5%   | GCM31A7U3A680JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 82pF  | +/-5%   | GCM31A7U3A820JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 100pF | +/-5%   | GCM31A7U3A101JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 120pF | +/-5%   | GCM31A7U3A121JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 150pF | +/-5%   | GCM31A7U3A151JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 180pF | +/-5%   | GCM31A7U3A181JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 200pF | +/-5%   | GCM31A7U3A221JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 270pF | +/-5%   | GCM31A7U3A271JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.00             | U2J | 1kV | 330pF | +/-5%   | GCM31A7U3A331JX01D | Mass Production |
| 1206 | 3.2 x 1.6          | 1.25             | U2J | 1kV | 390pF | +/-5%   | GCM31B7U3A391JX01L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.25             | U2J | 1kV | 470pF | +/-5%   | GCM31B7U3A471JX01L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.25             | U2J | 1kV | 560pF | +/-5%   | GCM31B7U3A561JX01L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.25             | U2J | 1kV | 680pF | +/-5%   | GCM31B7U3A681JX01L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | U2J | 1kV | 820pF | +/-5%   | GCM31C7U3A821JX03L | Mass Production |
| 1206 | 3.2 x 1.6          | 1.60             | U2J | 1kV | 1.0nF | +/-5%   | GCM31C7U3A102JX03L | Mass Production |

< Rated Volt. DC1kV , Size 1210 >

| Size | Dimension LxW (mm) | Dimension T (mm) | TC  | WV  | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------|------------------|-----|-----|-------|---------|--------------------|-----------------|
| 1210 | 3.2 x 2.5          | 1.25             | U2J | 1kV | 1.2nF | +/-5%   | GCM32B7U3A122JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 1.50             | U2J | 1kV | 1.5nF | +/-5%   | GCM32Q7U3A152JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.00             | U2J | 1kV | 1.8nF | +/-5%   | GCM32D7U3A182JX01L | Mass Production |
| 1210 | 3.2 x 2.5          | 2.00             | U2J | 1kV | 2.2nF | +/-5%   | GCM32D7U3A222JX01L | Mass Production |

< Rated Volt. DC1kV , Size 1812 >

| Size | Dimension LxW (mm) | Dimension T (mm) | TC  | WV  | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------|------------------|-----|-----|-------|---------|--------------------|-----------------|
| 1812 | 4.5 x 3.2          | 1.50             | U2J | 1kV | 2.7nF | +/-5%   | GCM43Q7U3A272JX01L | Mass Production |
| 1812 | 4.5 x 3.2          | 1.50             | U2J | 1kV | 3.3nF | +/-5%   | GCM43Q7U3A332JX01L | Mass Production |
| 1812 | 4.5 x 3.2          | 2.00             | U2J | 1kV | 3.9nF | +/-5%   | GCM43D7U3A392JX01L | Mass Production |
| 1812 | 4.5 x 3.2          | 2.00             | U2J | 1kV | 4.7nF | +/-5%   | GCM43D7U3A472JX01L | Mass Production |

< Rated Volt. DC1kV , Size 2220 >

| Size | Dimension LxW (mm) | Dimension T (mm) | TC  | WV  | Cap   | Cap Tol | Murata Global P/N  | Status          |
|------|--------------------|------------------|-----|-----|-------|---------|--------------------|-----------------|
| 2220 | 5.7 x 5.0          | 1.50             | U2J | 1kV | 5.6nF | +/-5%   | GCM55Q7U3A562JX01L | Mass Production |
| 2220 | 5.7 x 5.0          | 1.50             | U2J | 1kV | 6.8nF | +/-5%   | GCM55Q7U3A682JX01L | Mass Production |
| 2220 | 5.7 x 5.0          | 2.00             | U2J | 1kV | 8.2nF | +/-5%   | GCM55D7U3A822JX01L | Mass Production |
| 2220 | 5.7 x 5.0          | 2.00             | U2J | 1kV | 10nF  | +/-5%   | GCM55D7U3A103JX01L | Mass Production |