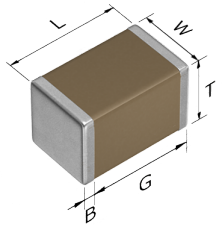
Multilayer Ceramic Chip Capacitors

C2012X7R2E103K125AA

RoHS Reach Halogen Free Pb Free

TDK item description	C2012X7R2E103KT****
Applications	Commercial Grade Please refer to Part No. CGA4J3X7R2E103K125AA for Automotive use.
Feature	Mid Voltage (100 to 630V)
Series	C2012 [EIA 0805]
Status	Production
Brand	TDK



Size	
Length(L)	2.00mm ±0.20mm
Width(W)	1.25mm ±0.20mm
Thickness(T)	1.25mm ±0.20mm
Terminal Width(B)	0.20mm Min.
Terminal Spacing(G)	0.50mm Min.
Recommended Land Pattern (PA)	1.00mm to 1.30mm(Flow Soldering) 0.90mm to 1.20mm(Reflow Soldering)
Recommended Land Pattern (PB)	1.00mm to 1.20mm(Flow Soldering) 0.70mm to 0.90mm(Reflow Soldering)
Recommended Land Pattern (PC)	0.80mm to 1.10mm(Flow Soldering) 0.90mm to 1.20mm(Reflow Soldering)

Electrical Characteristics	
Capacitance	10nF ±10%
Rated Voltage	250VDC
Temperature Characteristic	X7R(±15%)
Dissipation Factor (Max.)	3%
Insulation Resistance (Min.)	10000MΩ

Other	
Soldering Method	Wave (Flow) Reflow
AEC-Q200	NO
Packing	Embossed (Plastic)Taping [180mm Reel]
Package Quantity	2000pcs

! Images are for reference only and show exemplary products.
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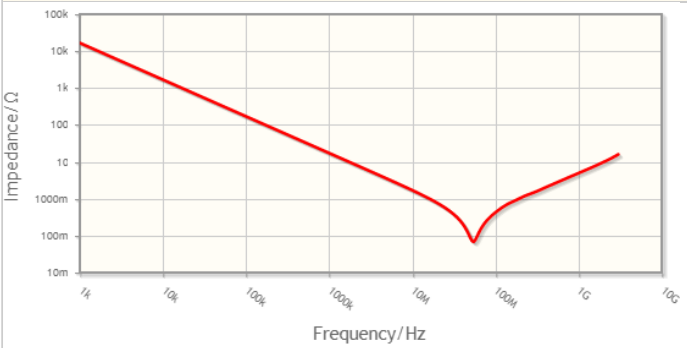
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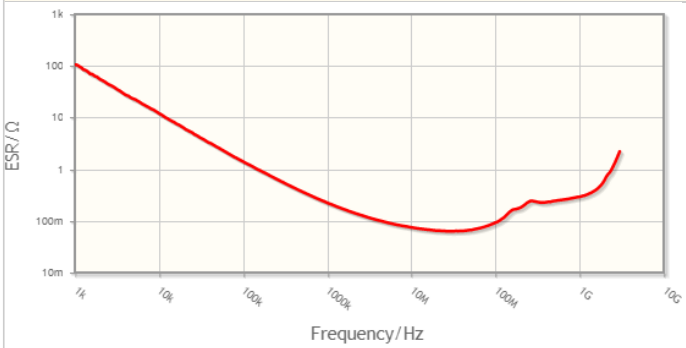
Characteristic Graphs(This is reference data, and does not guarantee the products characteristics.)

Impedance



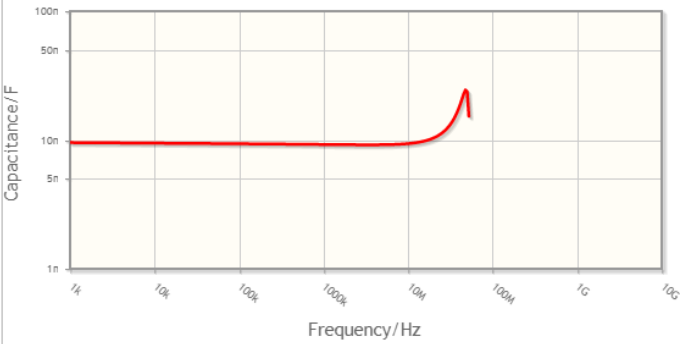
C2012X7R2E103K125AA

ESR



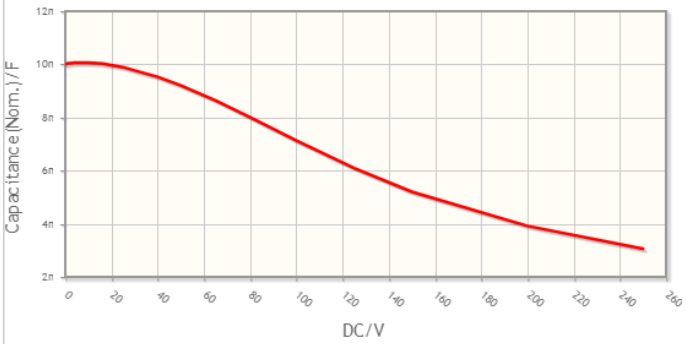
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Capacitance



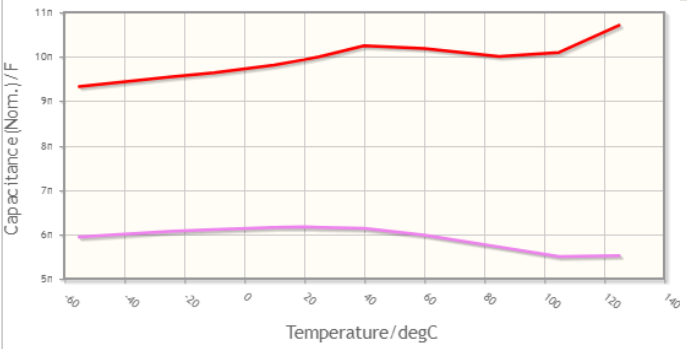
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DC Bias Characteristic



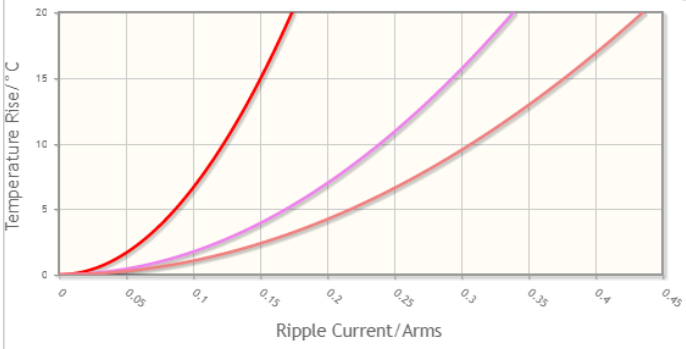
C2012X7R2E103K125AA

Temperature Characteristic



C2012X7R2E103K125AA(No Bias) C2012X7R2E103K125AA(DC Bias = 125V)

Ripple Temperature Rising



C2012X7R2E103K125AA(100kHz) C2012X7R2E103K125AA(500kHz) C2012X7R2E103K125AA(1MHz)

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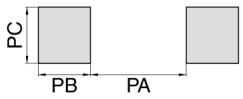
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Associated Images

Land Pattern (Terminal Connection)



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