

# DATA SHEET

## ZERO OHM RESISTORS

ZOR Series

1/6W AND 1/4W

RoHS compliant & Halogen Free



**YAGEO**

Product specification – August 13, 2021 V.0





**ORDERING INFORMATION**

Part number of the zero ohm resistors is identified by the series, power rating, tolerance, packing, temperature coefficient, forming and resistance value.

**PART NUMBER**

ZOR    -25    -    T    -    52-    0R  
 (1)    (2)    (3)    (4)    (5)    (6)    (7)

**APPLICATIONS**

- All general purpose applications

**FEATURES**

- AEC-Q200 qualified
- High stable performance and high reliability
- Suitable for automatic machine insertion
- RoHS compliant and halogen free

**(1) SERIES NAME**

ZOR Series

**(2) POWER RATING**

-12 = 1/6W

-25 = 1/4W

**(3) TOLERANCE**

- = Based on spec.

**(4) PACKAGING**

R = Reel Pack

B = Bulk

T = Box Pack

**(5) TEMPERATURE COEFFICIENT OF RESISTANCE**

- = Based on spec.

**(6) FORMING**

26- = 26mm

FT = FT Type Forming

52- = 52.4mm

PN = PANAsert

M = M-Type Forming

AV = AVIsert

MT = MT Type Forming

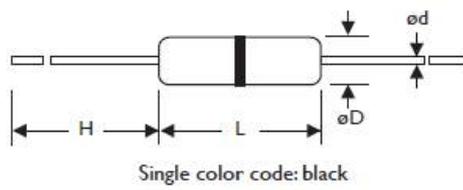
**(7) RESISTANCE VALUE**

0R = 0Ω

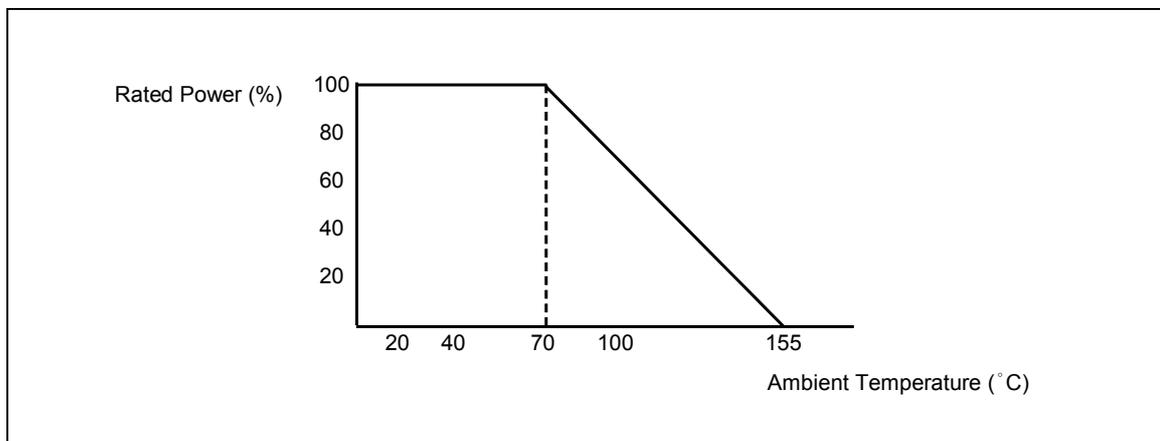
**DIMENSIONS**

Unit: mm

	Normal	L	$\psi D$	H	$\psi d$
ZOR-12		$3.3 \pm 0.4$	$1.8 \pm 0.3$	$28 \pm 2.0$	$0.45 \pm 0.05$
ZOR-25		$6.3 \pm 0.5$	$2.3 \pm 0.3$	$28 \pm 2.0$	$0.55 \pm 0.05$



**DERATING CURVE**



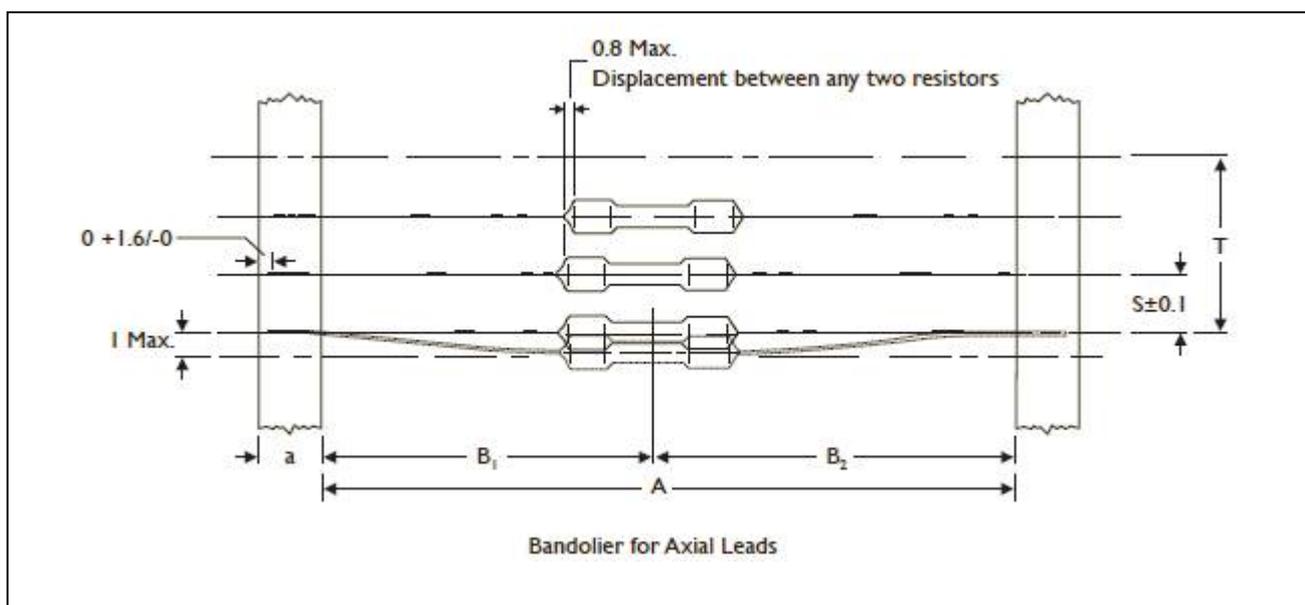
**ELECTRICAL CHARACTERISTICS**

CHARACTERISTICS	ZOR-12, ZOR-25	
Maximum Resistance	10mΩ or less	
Min. Insulation Resistance	Dry	10,000MΩ
	Wet	100MΩ
Min. Dielectric Withstanding Voltage	Atmospheric	500V RMS
	Reduced	325V RMS
Insulation Flammability	Resistor insulation is self extinguishing within 10 Sec. after externally applied flame is removed	
Current Rating	10 AMPS at 70°C for 1/4W 8 AMPS at 70°C for 1/6W	
Operating Temperature Range	-55°C to +155°C	

**TEST AND REQUIRMENTS**

TEST	TEST METHOD	PROCEDURE	APPRAISE
Solderability	IEC 60115-1 4.17	245±5°C for 3±0.5 Sec.	95% Min. coverage
Solvent Resistance of Marking	IEC 60115-1 4.30	IPA for 5±0.5 Min. with ultrasonic	No deterioration of coatings and markings
Robustness of Terminations	IEC 60115-1 4.16	Direct load for 10 Sec. in the direction of the terminal leads	≥2.5Kg(24.5N)D

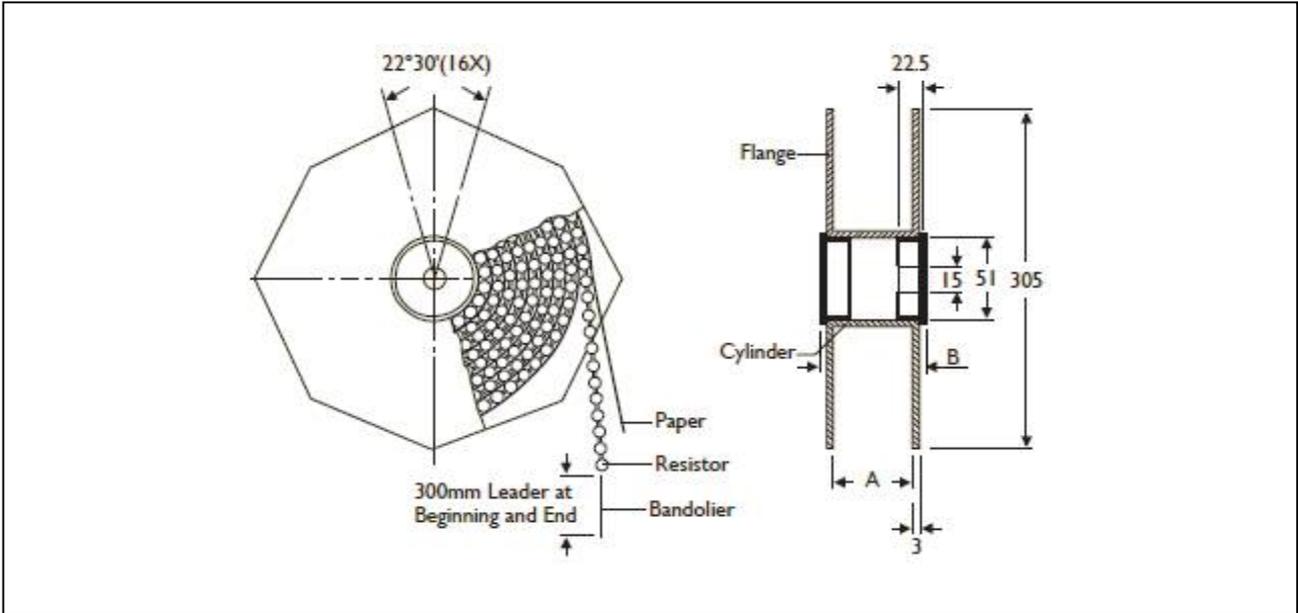
**AXIAL / REEL TAPE SPECIFICATION**



Unit: mm

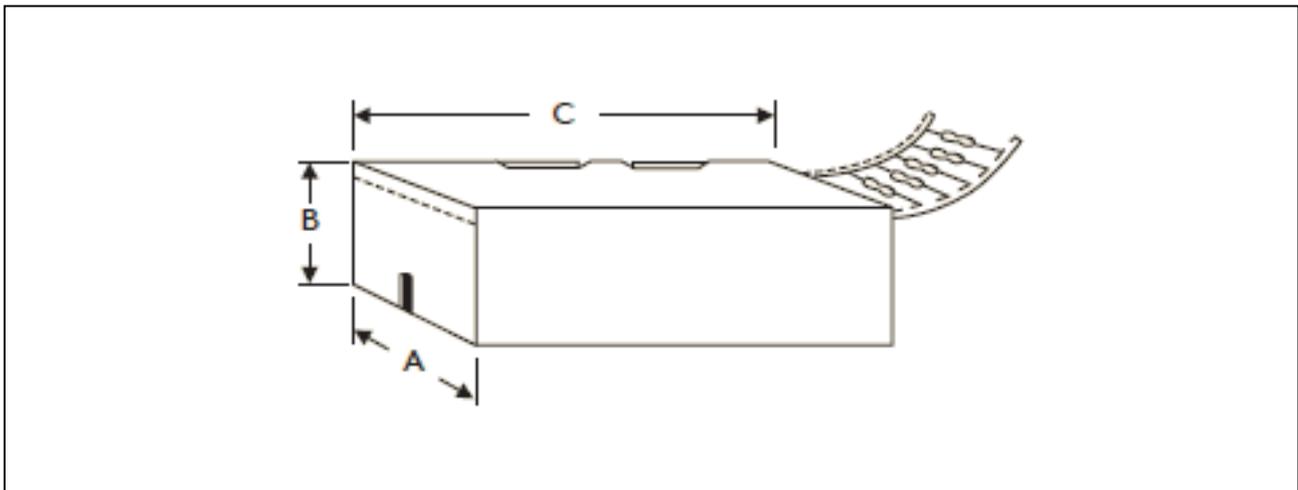
Normal	a	A	B1-B2 (Max.)	S (spacing)	T (max. deviation of spacing)
ZOR-12	6 ± 0.5	52.4 ± 1.5	1.2	5	1 mm per 10 spacing, 0.5 mm per 5 spacing
		26.0 ± 1.5	1.0		
ZOR-25	6 ± 0.5	52.4 ± 1.5	1.2	5	
		26.0 ± 1.5	1.0		

**TAPE ON REEL PACKING**



TYPE	Unit: mm/piece		
Normal	Across Flange(A)	B	Quantity Per Reel
ZOR-12	66.5	75.5	5,000
ZOR-25	66.5	75.5	5,000

**TAPE ON BOX PACKING**



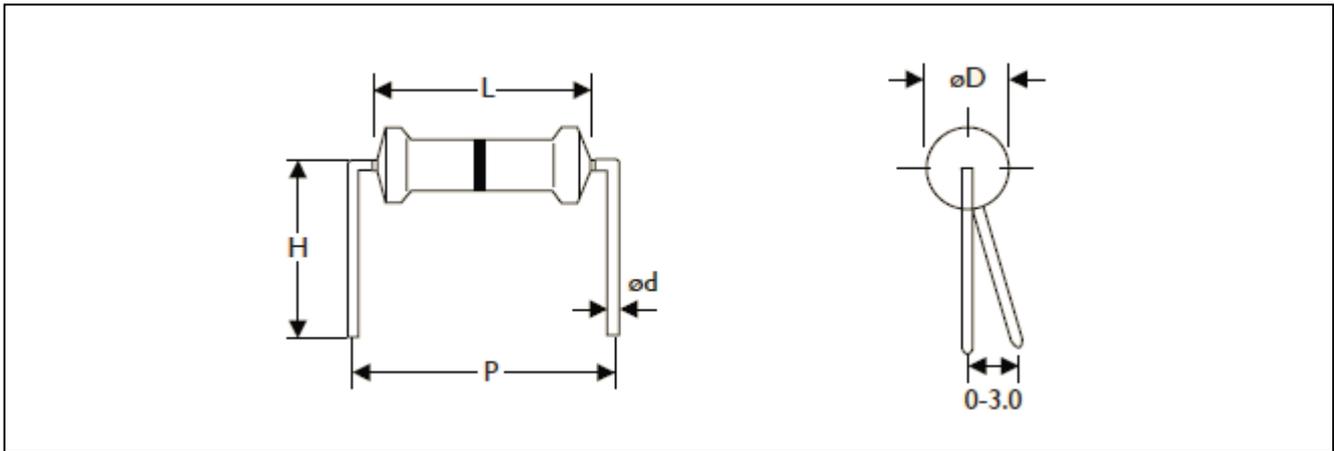
TYPE	DIMENSIONS			Unit: mm/piece
Normal	A	B	C	Quantity Per Box
ZOR-12	48	102	255	5,000
ZOR-12	81	70	260	5,000

**BULK PACKING**

Normal	Piece/Per Inner Box	Bag/Per Inner Box	Piece Per Bag
ZOR-12	10,000	10	1,000
ZOR-25	10,000	10	1,000

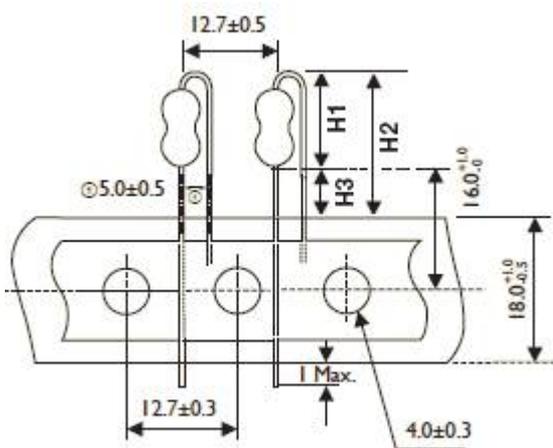
**FORMING**

**M TYPE**



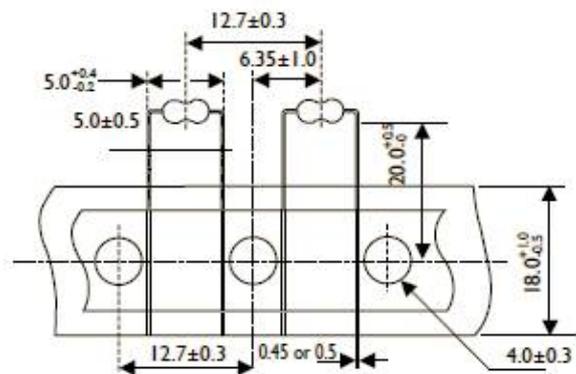
TYPE	DIMENSIONS					Unit: mm
Normal	L	ψD	ψd	P	H	
ZOR-12	3.3 ± 0.4	1.8 ± 0.3	0.45 ± 0.05	6.0 ± 1	10.0 ± 1	
ZOR-25	6.3 ± 0.5	2.3 ± 0.3	0.55 ± 0.05	10.0 ± 1	10.0 ± 1	

**FT TYPE (Taping Pack)**



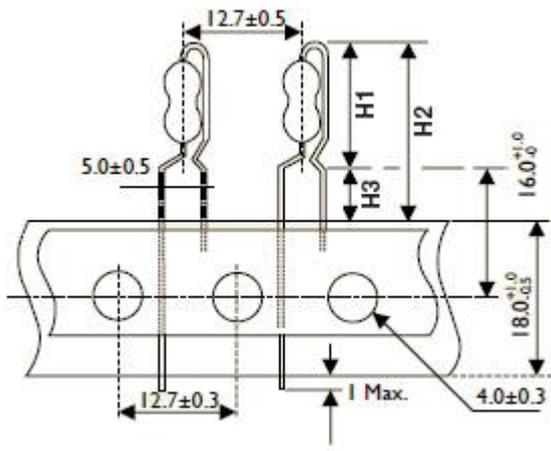
**MT TYPE (Taping Pack)**

Rated Watts : 1/6W



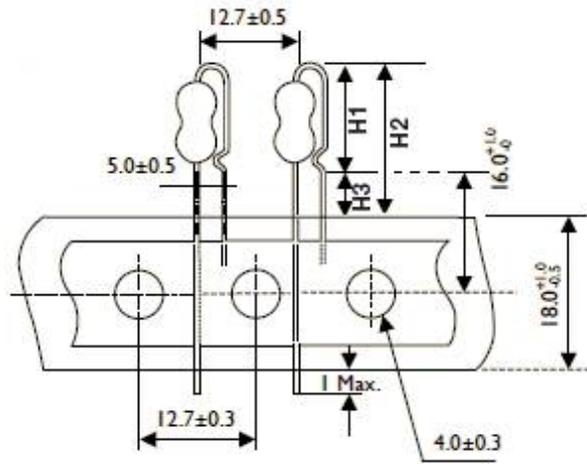
TYPE	DIMENSIONS			Unit: mm
Normal	H1 Max.	H2 Max.	H3 Max.	
ZOR-25	10	18.5	8.5	

**PN TYPE (Taping Pack)**



TYPE	DIMENSIONS			Unit: mm
Normal	H1 Max.	H2 Max.	H3 Max.	
ZOR-25	13	21.5	8.5	

**AV TYPE (Taping Pack)**



TYPE	DIMENSIONS			Unit: mm
Normal	H1 Max.	H2 Max.	H3 Max.	
ZOR-25	11.5	20	8.5	

**REVISION HISTORY**

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Aug. 2, 2021	-	- First issue of this specification

*“ Yageo reserves all the rights for revising the content of this datasheet without further notification, as long as the products itse lf are unchanged. Any product change will be announced by PCN.”*

## LEGAL DISCLAIMER

YAGEO, its distributors and agents (collectively, "YAGEO"), hereby disclaims any and all liabilities for any errors, inaccuracies or incompleteness contained in any product related information, including but not limited to product specifications, datasheets, pictures and/or graphics. YAGEO may make changes, modifications and/or improvements to product related information at any time and without notice.

YAGEO makes no representation, warranty, and/or guarantee about the fitness of its products for any particular purpose or the continuing production of any of its products. To the maximum extent permitted by law, YAGEO disclaims (i) any and all liability arising out of the application or use of any YAGEO product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for a particular purpose, non-infringement and merchantability.

YAGEO products are designed for general purpose applications under normal operation and usage conditions. Please contact YAGEO for the applications listed below which require especially high reliability for the prevention of defects which might directly cause damage to the third party's life, body or property: Aerospace equipment (artificial satellite, rocket, etc.), Atomic energy-related equipment, Aviation equipment, Disaster prevention equipment, crime prevention equipment, Electric heating apparatus, burning equipment, Highly public information network equipment, data-processing equipment, Medical devices, Military equipment, Power generation control equipment, Safety equipment, Traffic signal equipment, Transportation equipment and Undersea equipment, or for any other application or use in which the failure of YAGEO products could result in personal injury or death, or serious property damage. Particularly **YAGEO Corporation and its affiliates do not recommend the use of commercial, automotive, and/or COTS grade products for high reliability applications or manned space flight.**

Information provided here is intended to indicate product specifications only. YAGEO reserves all the rights for revising this content without further notification, as long as products are unchanged. Any product change will be announced by PCN.