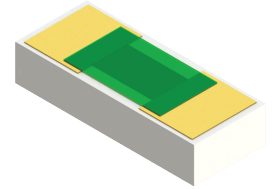


**RS0502ZZ-XXXXWN-90 Features:**

- Single-Sided (Flip-Chip) Terminal Configuration
- Solder, Epoxy or Wirebondable Terminals
- Customer Defined Testing Available
- RoHS Compliant or SnPb Available
- Non-Magnetic Available
- Tape & Reel (Film Side Down) and Waffle Pack Available (Standard is bulk)



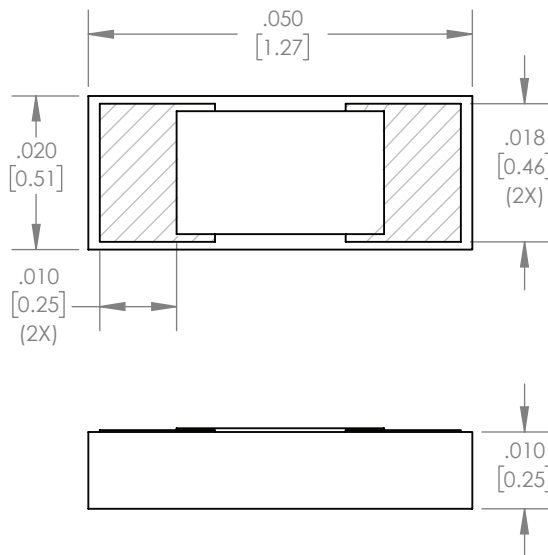
Actual Size

**RS0502ZZ-XXXXWN-90 Parameters:**

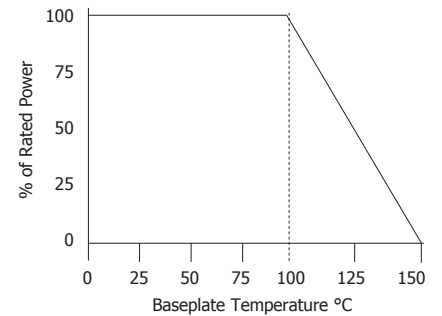
Resistance Range:	0.5Ω - 1MΩ
Rated Power*:	160mW
Construction:	Thick Film on 0.010" Al <sub>2</sub> O <sub>3</sub>
Operating Temperature:	-55 to +150°C

\* Rating based on ≤100°C constant baseplate temperature

**RS0502ZZ-XXXXWN-90 Dimensions:**



**RS0502ZZ-XXXXWN-90 Power Derating Curve**



Dimensions in inches [mm]  
Tolerance is ± 0.005 [0.13]  
unless otherwise stated

**Ordering Information:**

**Example Part Number: RS0502CT-50R0JN-90**

RS	0502	ZZ	-	XXXX	W	N	-	90	UU
Prefix for Resistor w/ Single-Sided Terminals				Value Code	Tolerance	Normal Inspection		Substrate	Packaging
	Size			50R0 - 50Ω	F - 1%	Contact factory for additional options		90 - 0.010" Al <sub>2</sub> O <sub>3</sub>	Blank - Bulk
	0502			1000 - 100Ω	G - 2%				WP - Waffle Pack
				1001 - 1KΩ	J - 5%				TRD - Tape & Reel
				1002 - 10KΩ					
				1003 - 100KΩ					
				1004 - 1MΩ					
Terminal Metallization				RoHS	Magnetic	Solder	Epoxy	Wirebond	
AS - Tin Lead over Platinum Palladium Gold				No	No	Yes	No	No	
CB - Tin Lead over Nickel over Silver				No	Yes	Yes	No	No	
CC - 100% Matte Tin over Copper over Silver				Yes	No	Yes	No	No	
CT - 100% Matte Tin over Nickel over Silver				Yes	Yes	Yes	No	No	
GA - Gold				Yes	No	No	Yes	Yes	

Barry Industries reserves the right to change part number and/or process without notification.

**RS0502ZZ-XXXXWN-90 Reliability Specifications:**

Parameter:	Test Condition:	Results:
Short Time Overload	Apply 1.1x Rated Power for 5 Seconds.	≤ 5.0% Resistance Shift
Rated Load Life	Apply 1/2 Power Under 40°C ±2°C 90 Minutes on/ 30 Minutes off. Repeat for 100 hours	≤ 5.0% Resistance Shift
Moisture Resistance	MIL-PRF-55342 para 4.8.9 95% RH, 25°C - 65°C	≤ 5.0% Resistance Shift
Resistance to Soldering Heat	MIL-STD-202 Method 210 and MIL-PRF-55342 Para 4.8.8.1	≤ 5.0% Resistance Shift
Resistance to Bonding Exposure	MIL-PRF-55342 Para 4.8.8.2	≤ 5.0% Resistance Shift
Solderability	MIL-PRF-55342 Para 4.8.12	>95% Covered
High Temperature Storage	125°C ±2°C for 500 Hours	1.) ≤ 5.0% Resistance Shift 2.) No Significant Abnormality (Visual)
Thermal Shock	-65 to +125 30 Minutes Dwell, 5 Cycles	1.) ≤ 5.0% Resistance Shift 2.) No Significant Abnormality (Visual)

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