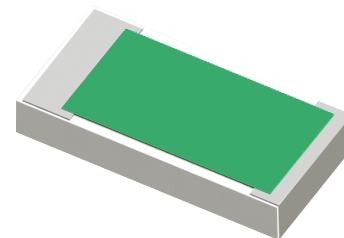


### TV1005ZZ-50R0WN-91 Features:

- Solder, Epoxy or Wirebondable Terminals
- RoHS Compliant or SnPb Terminals Available
- Customer Defined Testing Available
- High Rated Power
- Tape & Reel and Waffle Pack Available (Standard is Bulk)



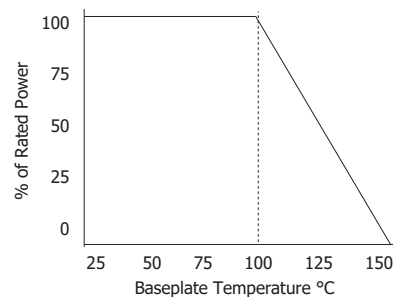
Actual Size

### TV1005ZZ-50R0WN-91 Parameters:

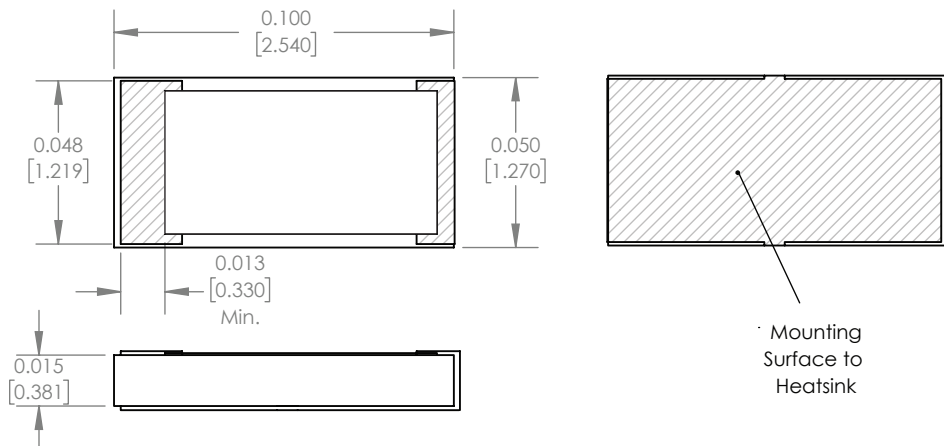
Operating Frequency:	DC - 6GHz
Rated Power:	5W*
Return Loss (Typical)**:	16dB or Better
Impedance:	50Ω***
Resistor Construction:	Thick Film on Al <sub>2</sub> O <sub>3</sub>
Operating Temperature:	-55 to +150°C

\* Rating based on ≤100°C constant baseplate temperature  
 \*\* In a matched, continuous 50Ω system with proper workmanship.  
 \*\*\* Other values available. Contact factory.

### TV1005ZZ-50R0WN-91 Power Derating Curve



### TV1005ZZ-50R0WN-91 Dimensions:



Dimensions in inches [mm]  
 Tolerance is ± 0.005 [0.127] unless otherwise stated

### Ordering Information:

TV	1005	ZZ -	50R0	W	N	-	91	UU
Prefix for Chip Termination	Size 1005	Impedance Value Code 50R0 - 50Ω	Tolerance G - 2% J - 5%	Normal Inspection Contact factory for additional options		Substrate 91 - 0.015" Al <sub>2</sub> O <sub>3</sub>	Packaging Blank - Bulk TR - Tape & Reel WP - Waffle Pack	

Terminal Metallization	RoHS	Magnetic	Solder	Epoxy	Wirebond
AS - SnPb Solder over Platinum Palladium Gold	No	No	Yes	No	No
BA - Palladium Silver	Yes	No	No	Yes	No
CT - Matte Tin over Nickel over Silver	Yes	Yes	Yes	No	No
CB - Tin Lead over Nickel over Silver	No	Yes	Yes	No	No
EA - Gold Input w/ Palladium Silver Ground	Yes	No	Yes (GND)	No	Yes (Input)
GA - Gold	Yes	No	No	Yes	Yes (Input)

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

## TV1005ZZ-50R0WN-91 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°C to +150°C 30 Minutes Dwell, 5 Cycles	1.) ≤ 5.0% Resistance Shift 2.) No Significant Abnormality (Visual)

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