Barry Industries

350W BeO Flanged Termination

Meets Thermal Shock Requirements of MIL-STD-202-107 Condition F3

T50R0-350-1E

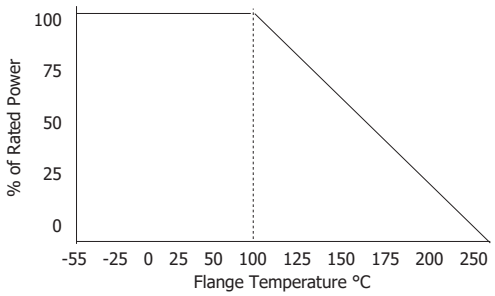
T50R0-350-1E Features:

- TCE Matched, All Brazed Construction
- RoHS Compliant
- Customer Defined Testing Available
- Enhanced Mechanical Strength
- Covered Resistor Element
- ±5% Resistor Tolerance

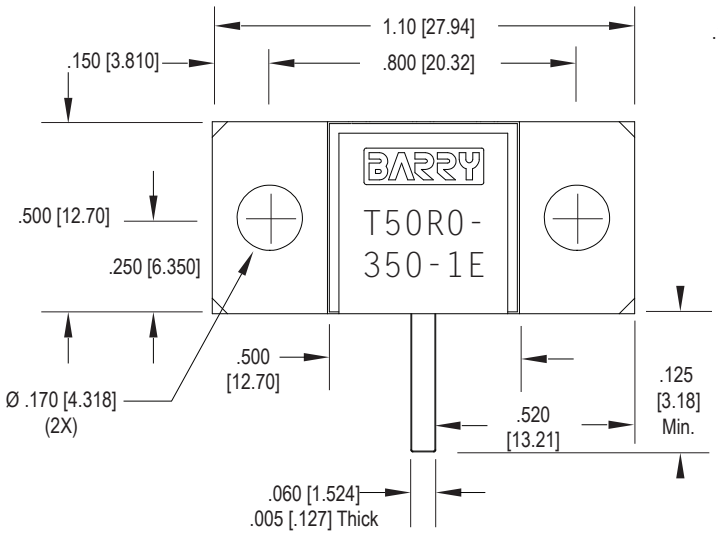
T50R0-350-1E Parameters:

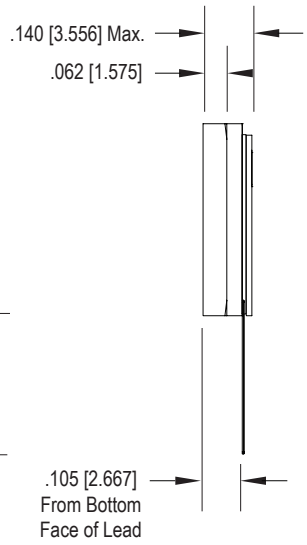
Operating Frequency:	DC - 1GHz
Rated Power:	350W*
Return Loss (Typical)**:	26.5dB or Better
Impedance:	50Ω ±5%***
Resistor Construction:	Thick Film on BeO Attached with AuGe Braze
Flange Construction:	Copper Tungsten
Lead Construction:	Copper Attached with AuGe Braze
Operating Temperature:	-55 to +250°C

T50R0-350-1E Power Derating Curve



T50R0-350-1E Dimensions:





RoHS COMPLIANT

Dimensions in inches [mm]
Tolerance is ± 0.010 [0.254]
unless otherwise stated

* Rating based on ≤100°C constant flange temperature
** In a matched, continious 50Ω system with proper workmanship
*** Other values and tolerances available. Contact factory.

Ordering Information:

T 50R0 - 350 - 1E

Prefix for Flanged Termination	Value Code	Rated Power	Assigned by Factory
	50R0 - 50Ω	350 - 350W	

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

T50R0-350-1E Reliability Data:

Parameter:	Test Condition:	Results:
Short Time Overload	Apply 1.1x Rated Power for 5 Seconds.	≤ 2.0% Resistance Shift
Rated Load Life	Apply Full Power at 100°C ±2°C 90 Minutes on/ 30 Minutes off. Repeat for 1000 hours	≤ 2.0% Resistance Shift
Moisture Resistance	MIL-PRF-55342 para.4.8.9 95% RH, 25°C - 65°C	≤ 2.0% Resistance Shift
Resistance to Soldering Heat (Lead)	MIL-STD-202 Method 210 Test Condition "A"	≤ 2.0% Resistance Shift
Resistance to Soldering Heat (Assembly)	MIL-STD-202 Method 210 Test Condition "J"	≤ 2.0% Resistance Shift
Terminal Strength	MIL-STD-202 Method 211 Test Condition "A" 3lbs. Test Condition "B" 5 bends	No Significant Abnormality (Visual)
Solderability (Lead only)	MIL-STD-202 Method 208 Test C	>95% Covered
High Temperature Storage	125°C ±2°C for 500 Hours	1.) ≤ 2.0% Resistance Shift 2.) No Significant Abnormality (Visual)
Thermal Shock	-65°C to +150°C Each Cycle 30 Minutes for 500 Hours	1.) ≤ 2.0% Resistance Shift 2.) No Significant Abnormality (Visual)

For further detail on the advantages of using TCE Matched Copper-Tungsten flange mount devices from Barry Industries please refer to the Application Note 'Finite Element Analysis of a High Power Resistor'. This document can be found on the Barry Industries website: www.barryind.com.