60W BeO Flanged Termination

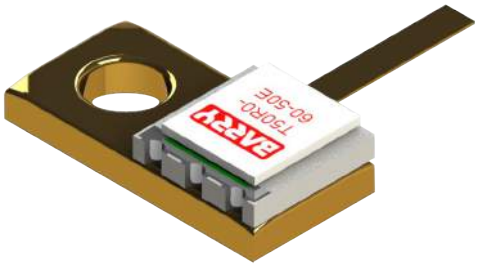
Meets MIL-STD-202 Method 109 Condition F3 Temperature Cycle

T50R0-60-50E

Barry Industries

T50R0-60-50E Features:

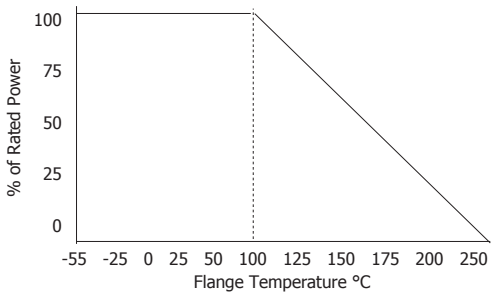
- TCE Matched, All Brazed Construction
- RoHS Compliant
- Customer Defined Testing Available
- Enhanced Mechanical Strength
- Covered Resistor Element
- ±5% Resistor Tolerance



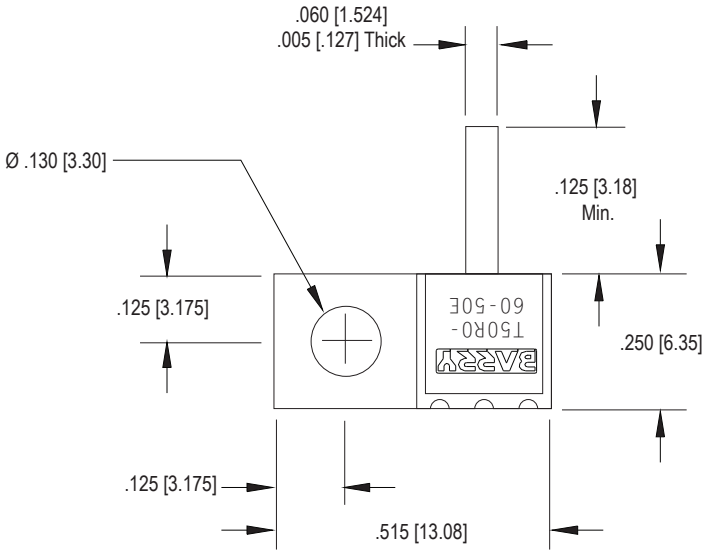
T50R0-60-50E Parameters:

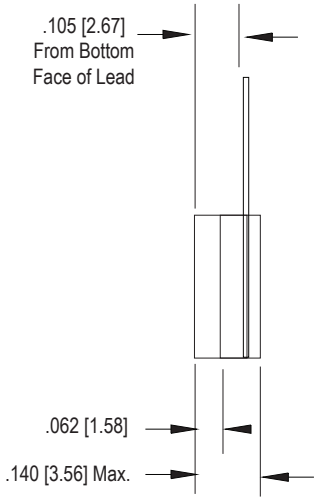
Operating Frequency:	DC - 6GHz
Rated Power:	60W*
Return Loss (Typical)**:	17dB or Better
Impedance:	50Ω ±5%***
Resistor Construction:	Thick Film on BeO Attached with AuGe Braze
Flange Construction:	Copper Tungsten
Lead Construction:	Copper Attached with AuGe Braze
Operating Temperature:	-55 to +150°C

T50R0-60-50E Power Derating Curve



T50R0-60-50E 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 - 60 - 50X

- T — Prefix for Flanged Termination
- 50R0 — Value Code: 50R0 - 50Ω
- 60 — Rated Power: 60 - 60W
- 50X — Assigned by Factory

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

ITAR Registered

T50R0-60-50E 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.

60 Walton St. Attleboro, MA 02703 • T (508) 226-3350 • F (508) 226-3317 • sales@barryind.com