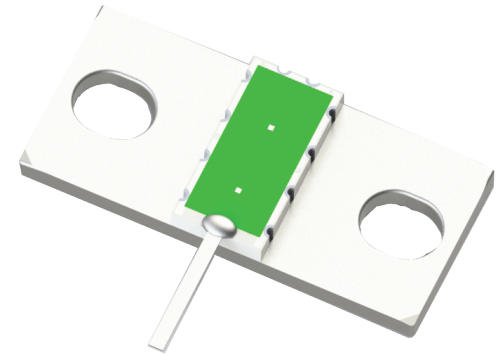
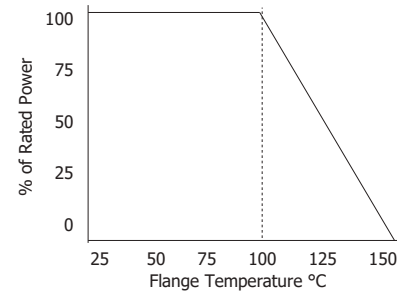
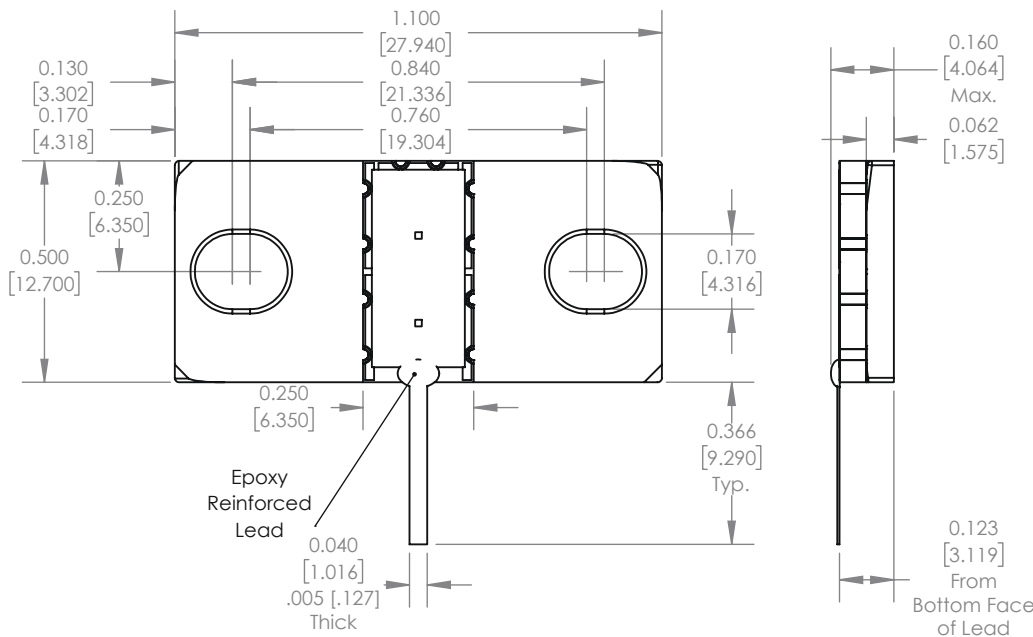


**T50R0-100-39Y Features:**

- Flange Mount
- RoHS Compliant
- Customer Defined Testing Available
- High Rated Power
- $\pm 5\%$  Resistor Tolerance

**T50R0-100-39Y Parameters:**

|                        |                           |
|------------------------|---------------------------|
| Operating Frequency:   | DC - 10GHz                |
| Input Power:           | 100W*                     |
| VSWR**:                | 1.3:1 (Max.)              |
| Impedance:             | 50 $\Omega$ $\pm 5\%$ *** |
| Resistor Construction: | Thick Film on BeO         |
| Flange Construction:   | Silver Plated Copper      |
| Lead Construction:     | Silver Plated Copper      |
| Operating Temperature: | -55 to +150°C             |


**T50R0-100-39Y  
Power Derating Curve**

**T50R0-100-39Y Dimensions:**


Dimensions in inches [mm]  
Tolerance is  $\pm 0.010$  [0.254]  
unless otherwise stated

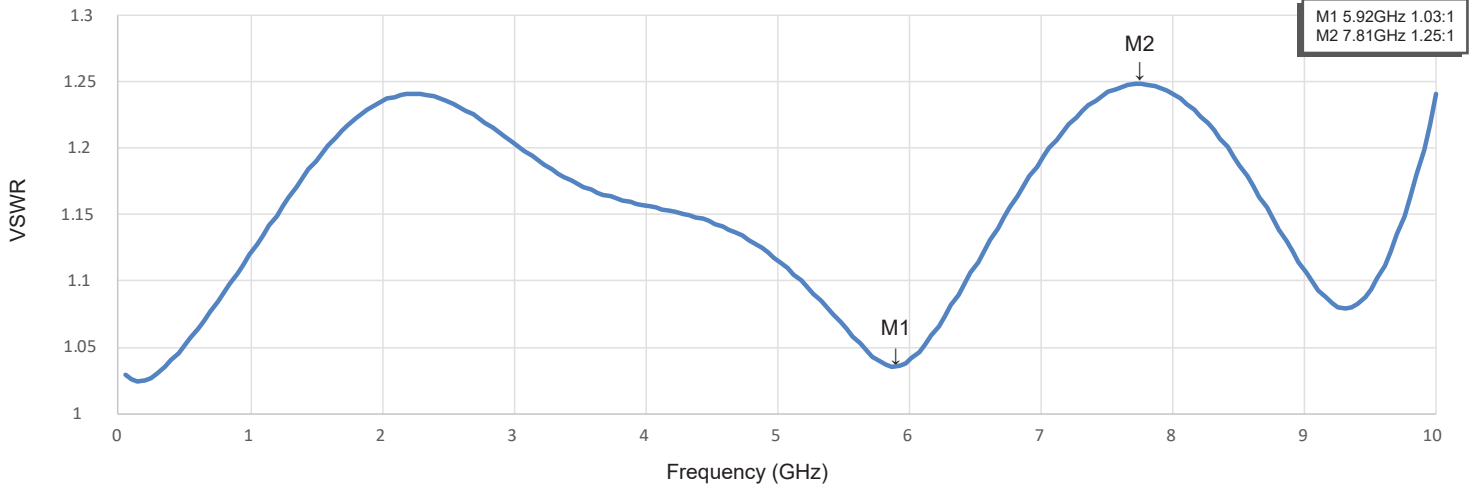
\* Rating based on  $\leq 100^\circ\text{C}$  constant flange temperature  
\*\* In a matched, continuous 50 $\Omega$  system with proper workmanship  
\*\*\* Other values and tolerances available. Contact factory.

**Ordering Information:**

|                                |                                  |   |                           |   |                     |
|--------------------------------|----------------------------------|---|---------------------------|---|---------------------|
| T                              | 50R0                             | - | 100                       | - | 39Y                 |
| Prefix for Flanged Termination | Value Code<br>50R0 - 50 $\Omega$ |   | Input Power<br>100 - 100W |   | Assigned by Factory |

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

### T50R0-100-39Y VSWR (Typical):

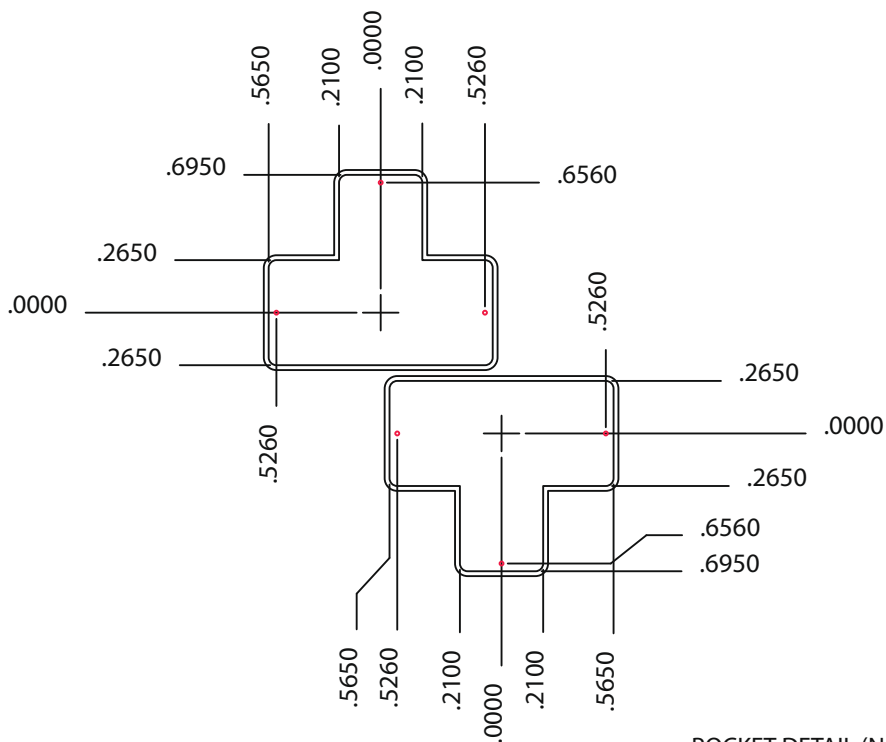
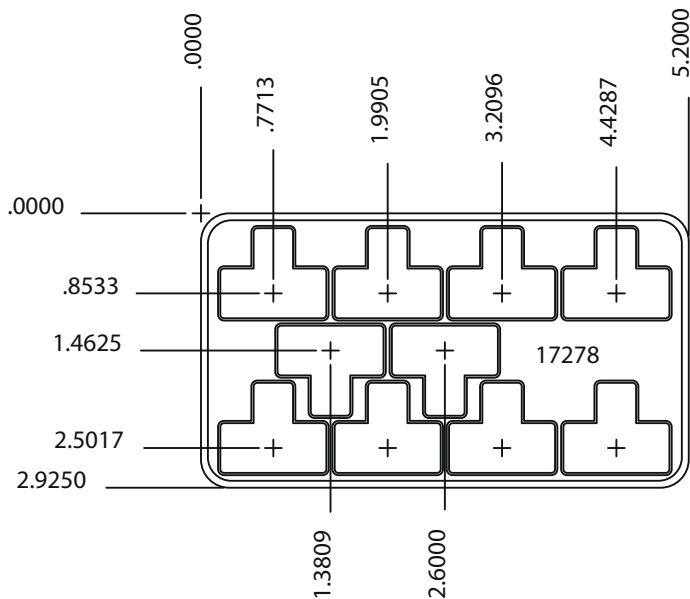


### T50R0-100-39Y Reliability Data:

| 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<br>90 Minutes on/ 30 Minutes off.<br>Repeat for 100 hours | ≤ 5.0% Resistance Shift  |
| Moisture Resistance                     | MIL-PRF-55342 para.4.8.9<br>95% RH, 25°C - 65°C   | ≤ 5.0% Resistance Shift  |
| Resistance to Soldering Heat (Lead)     | MIL-STD-202 Method 210<br>Test Condition "A"  | ≤ 5.0% Resistance Shift  |
| Resistance to Soldering Heat (Assembly) | MIL-STD-202 Method 210<br>Test Condition "J"  | ≤ 5.0% Resistance Shift  |
| Terminal Strength                       | MIL-STD-202 Method 211<br>Test Condition "A" 3lbs.<br>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.) ≤ 5.0% Resistance Shift<br>2.) No Significant Abnormality (Visual) |
| Thermal Shock                           | -5°C to +150°C<br>30 Minutes Dwell, 5 Cycles  | 1.) ≤ 5.0% Resistance Shift<br>2.) No Significant Abnormality (Visual) |

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T50R0-100-39Y Packaging Information:



POCKET DETAIL (Not to scale)

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