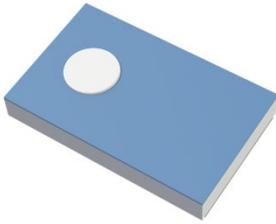


Surface Mount RF Termination
3 Watts, 50Ω



Description:

The XRT3A50Z4 is high performance 3 Watt (avg) Alumina (Al₂O₃) surface mount termination with a peak to average power rating of 12dB. This termination is proudly Made in the USA and is well suited to all end market frequency bands. Its country of origin makes it compliant for COTS Mil-Aero applications in NA and EMEA. The high power handling makes the part ideal for terminating high power Xinger 90-degree couplers and for use in microstrip circuits. The termination is also RoHS compliant.

Features:

- Made in the USA
- DC – 6.0 GHz
- Power 3 W (avg)
- Peak to average Ratio 12dB
- RoHS Compliant
- Low Return Loss
- 100% Tested
- Non-Nichrome Resistive Element
- Al₂O₃ Ceramic
- Small Size

General Specifications:

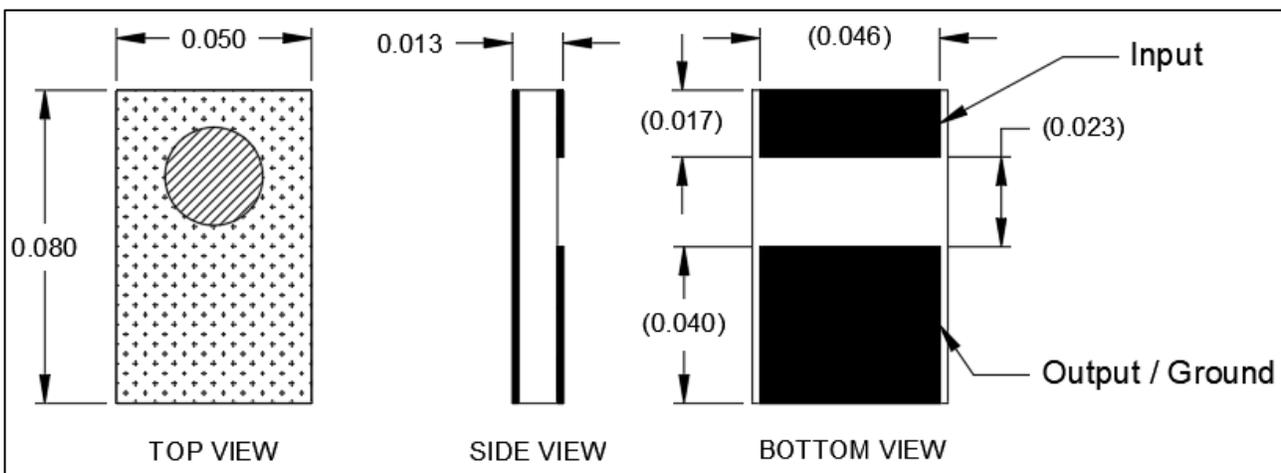
Resistive Element	Thick film
Substrate	Al ₂ O ₃ Ceramic
Terminal Finish	Matte Tin over Nickel Barrier
Operating Temperature	-55 to +150°C (see de-rating chart)

Electrical Specifications:

Power:	3 Watts (Avg Watts @ 100°C)
Max Frequency:	DC – 6.0 GHz
Return Loss:	>18 dB

Specification based on unit properly installed using suggested mounting instructions and a 50 ohm nominal impedance. Specifications subject to change.

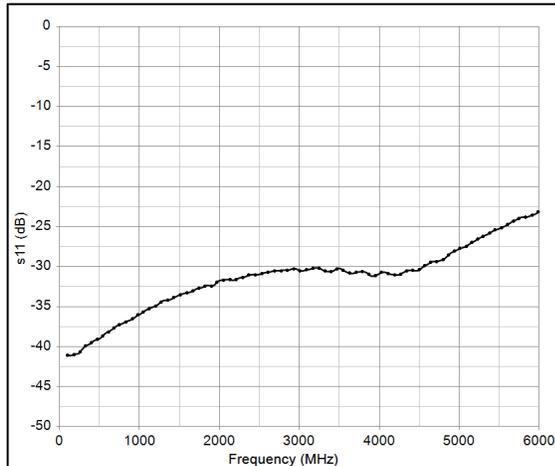
Mechanical Outline:



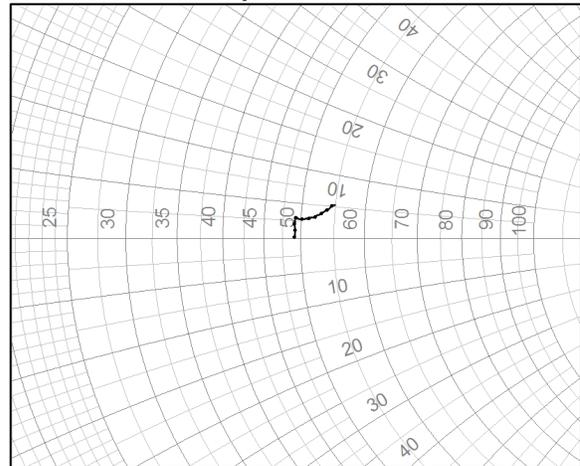
Tolerance is ±0.005", unless otherwise specified. All dimensions in inches.

Typical Performance:

Return loss:



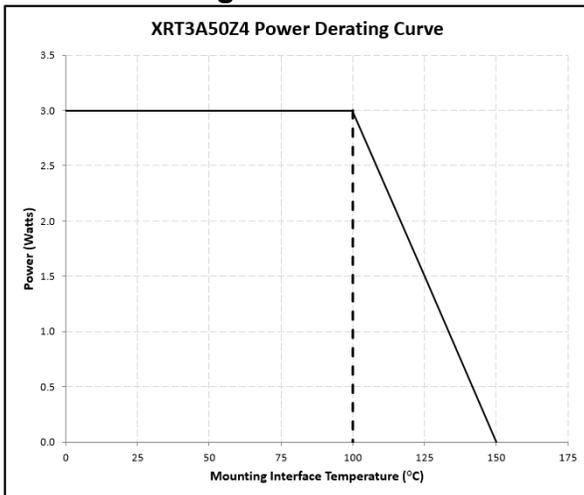
Impedance:



Mounting Footprint:

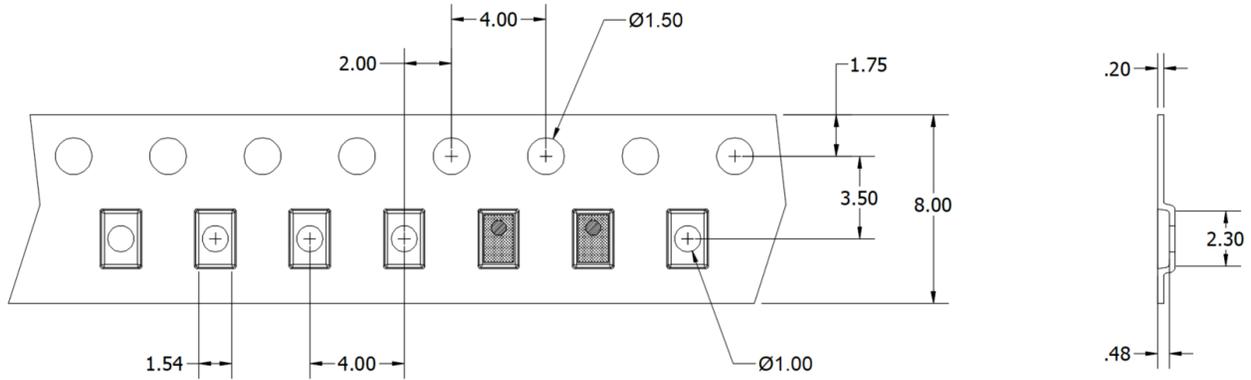
1. The component has been designed and qualified with this mounting footprint with a 0.020" test board with Dk value of approximately 3.5 comprised of commonly used board substrate materials such as RO4350 and Isola I-tera MT40. Deviations from the recommended mounting footprint may reduce RF and power handling performance. It is the customer's responsibility to qualify the component in the end application.
2. A 50 ohm transmission line is for reference only and can be oriented in any direction. Customer to determine transmission line and gap dimensions to achieve 50 ohm impedance for end application.
3. To ensure proper electrical and thermal performance there must be a ground plane with 100% solder connection underneath the part orientated as shown with part marking facing up.
4. PTH connecting pads to ground are representative.
5. Ground vias under part should be filled to prevent solder wicking.
6. Solder mask and solder stencil dimensions may vary due to different manufacturer capabilities and process variations. Layers may be modified to account for manufacturer capabilities.
7. Dimensions are in inches [millimeters].

Power Derating:



Packaging and Ordering Information:

Parts are available in reel and are packaged per EIA 481. Parts are oriented in tape and reel as shown below.



Dimensions are in Millimeters

Direction of Part Feed (Unloading)

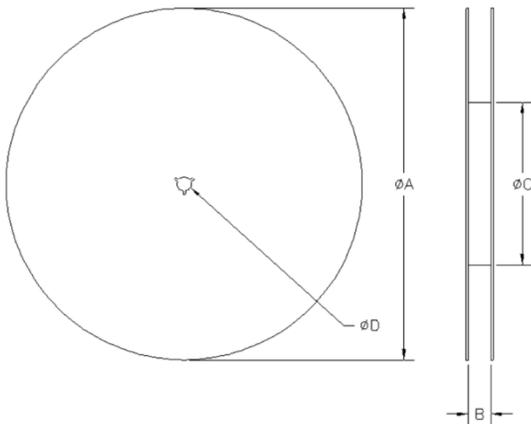


TABLE 1
REEL DIMENSIONS (mm)

ØA	177.80
B	8.00
ØC	50.80
ØD	13.00

Contact us:
rf&s_support@ttm.com