

Surface Mount RF Termination
20 Watt, 50Ω



Description:

The XRT20A50Z4 is high performance 20 Watt (avg) Alumina (Al_2O_3) 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 – 5.0 GHz
- Power 20 W (avg)
- Peak-average 12dB
- RoHS Compliant
- Low Return Loss
- 100% Tested
- Non-Nichrome Resistive Element
- Al_2O_3 Ceramic

General Specifications:

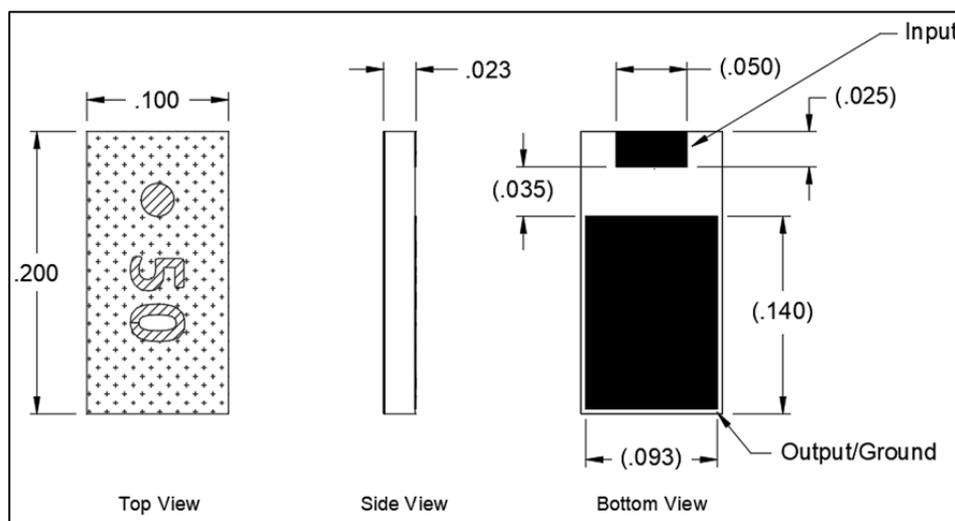
Resistive Element	Thick film
Substrate	Al_2O_3 Ceramic
Terminal Finish	Matte Tin over Nickel Barrier
Operating Temperature	-55 to +150°C (see de-rating chart)

Electrical Specifications:

Power:	20 Watt (Avg Watts @ 100°C)
Max Frequency:	DC-5.0 GHz
Return Loss:	>26 dB DC – 4.0 GHz >20 dB 4.0 - 5.0 GHz

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

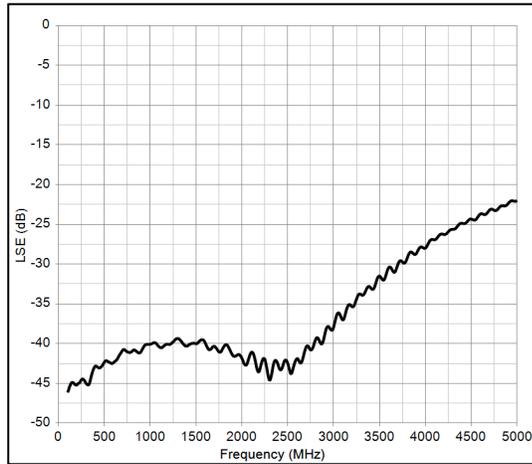
Mechanical Outline:



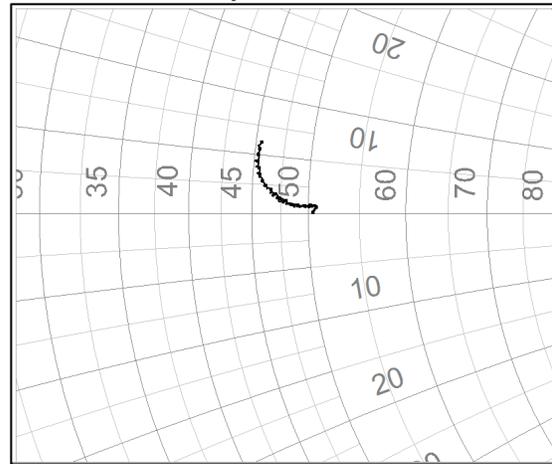
Tolerance is ± 0.005 ", unless otherwise specified. All dimensions in inches.

Typical Performance:

Return loss:



Impedance:



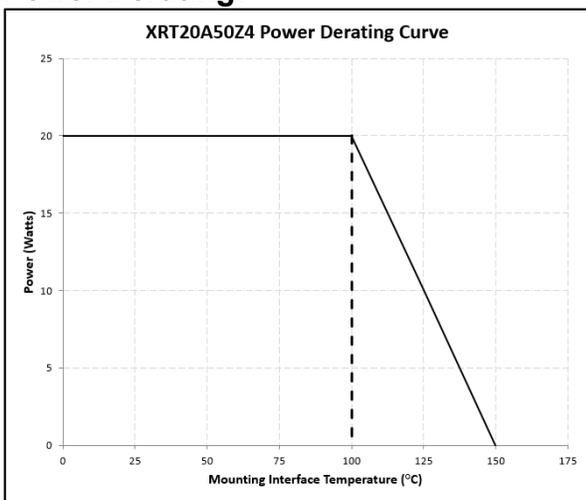
Mounting Footprint:

To ensure proper electrical and thermal performance there must be a ground plane with 100% solder connection underneath the part orientated as shown with text facing up

- Landing Pattern
- ▨ Solder Stencil (omitted in View 1 for clarity)
- ▨ Solder Mask (omitted in View 1 for clarity)
- ▨ PCB Pattern (omitted in View 2 for clarity)

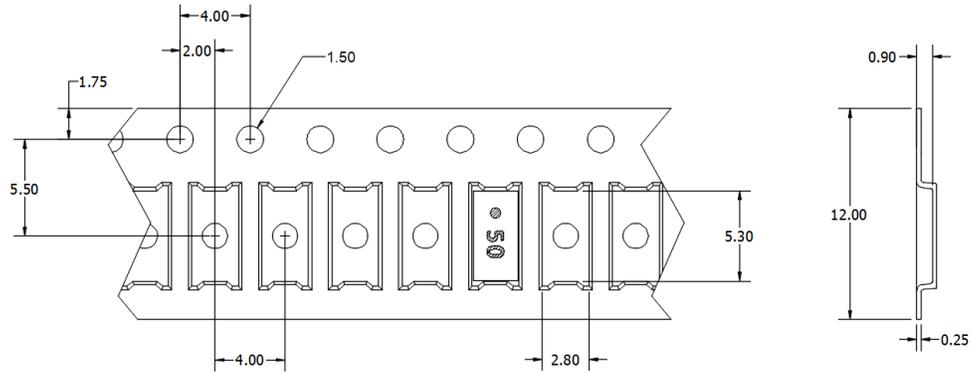
1. The component has been designed and qualified with this mounting footprint with a 0.020" Rogers 4350 single layer test board. Deviations from the recommended footprint may reduce RF and power handling performance. It is the customer's responsibility to qualify the component in the end application.
2. 50 Ohm Transmission line can be oriented in any direction.
3. PTH connecting pads to ground are representative.
4. 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.
5. Some features omitted in View 2 for clarity.
6. 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 Millimeters

Direction of Part Feed (Unloading)

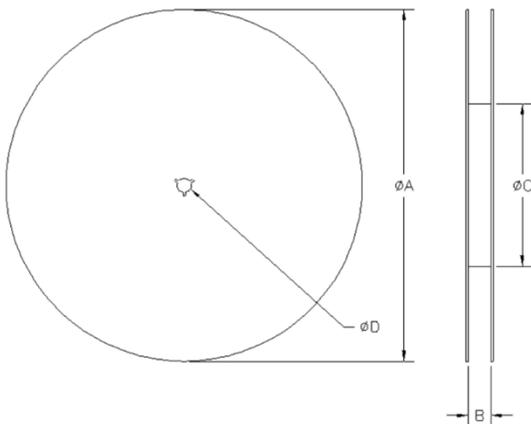


TABLE 1
REEL DIMENSIONS (mm)

$\varnothing A$	177.8
B	12.0
$\varnothing C$	50.8
$\varnothing D$	13.0

Contact us:
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