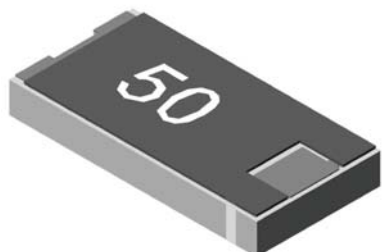


#### Description



The A16A50X4 is high performance Alumina ( $\text{Al}_2\text{O}_3$ ) chip termination intended as a low cost alternative to Beryllium Oxide ( $\text{BeO}$ ) and Aluminum Nitride ( $\text{AlN}$ ). The termination is well suited to all cellular frequency bands such as; AMPS, GSM, DCS, PCS, PHS and UMTS. The medium power handling makes the part ideal for terminating circulators and for use in power combiners. The termination is also RoHS compliant!

#### General Specifications

<b>Resistive Element</b>	Thick film
<b>Substrate</b>	$\text{Al}_2\text{O}_3$ Ceramic
<b>Terminal Finish</b>	Matte Tin over Nickel Barrier
<b>Operating Temperature</b>	-55 to +150°C (see de-rating chart)

Tolerance is  $\pm 0.010$ ", unless otherwise specified. Designed to meet or exceed applicable portions of MIL-E-5400. **All dimensions in inches.**

#### Electrical Specifications

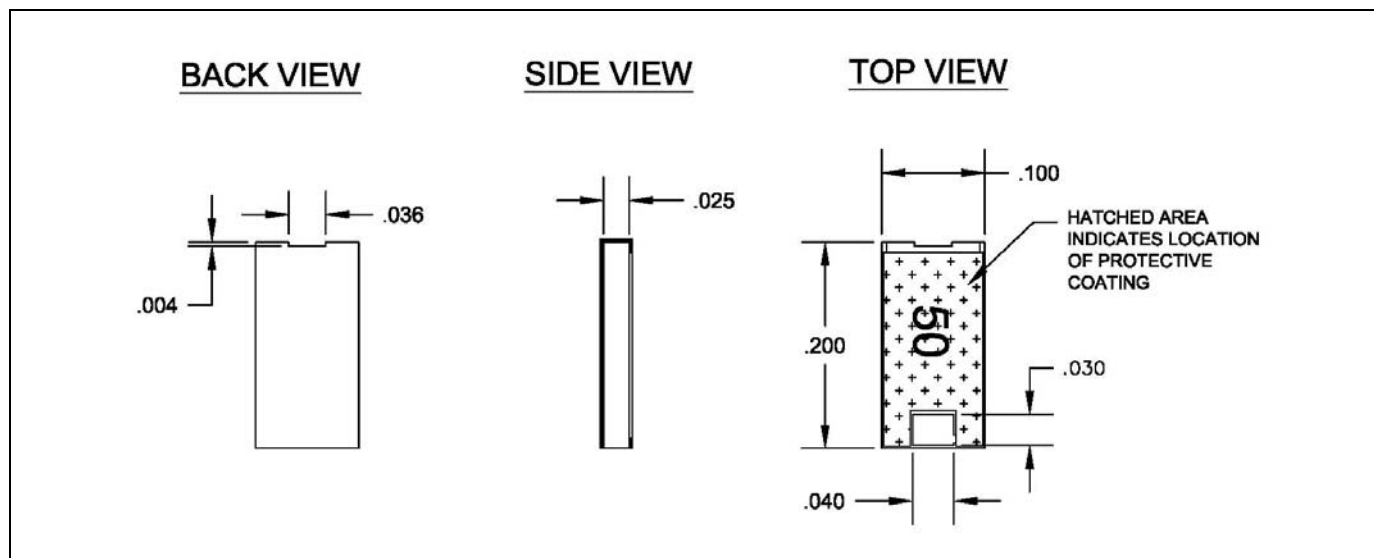
<b>Resistance Value:</b>	50 Ohms, $\pm 2\%$
<b>Power:</b>	16 Watts
<b>Frequency Range:</b>	DC – 4.0 GHz
	> 28 dB to 2.2 GHz
<b>Return Loss</b>	> 25 dB to 2.7 GHz
	> 20 dB to 4.0 GHz

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

#### Features:

- RoHS Compliant
- 16 Watts
- DC – 4.0 GHz
- $\text{Al}_2\text{O}_3$  Ceramic
- Non-Nichrome Resistive Element
- Low VSWR
- 100% Tested
- Small Size

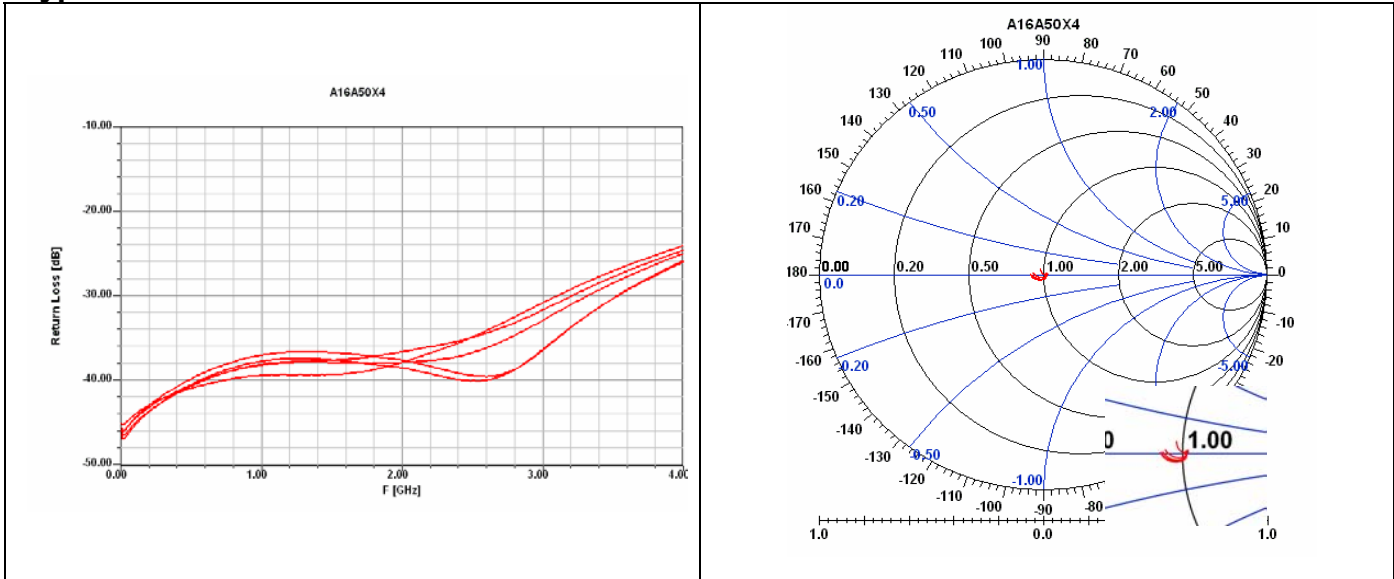
#### Outline Drawing



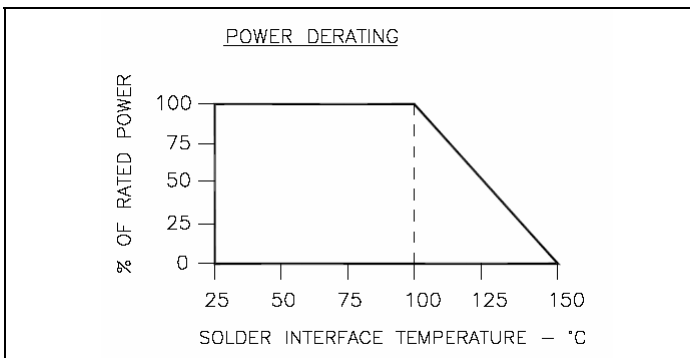
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### Typical Performance:



### Power De-rating:



### Tape & Reel:

Available upon request.

### Mounting Footprint and Procedure:

**SUGGESTED STRESS RELIEF METHODS**  
SCALE: NONE

**NOT RECOMMENDED APPLICATION**  
SCALE: NONE

Correct Lead Orientation

Alternative Lead Orientation (May Require External Matching)

1. MAKE SURE THAT THE DEVICES ARE MOUNTED ON FLAT SURFACES (.001" UNDER THE DEVICE) TO OPTIMIZE THE HEAT TRANSFER.
2. POSITION DEVICE ON MOUNTING SURFACE AND SOLDER IN PLACE USING A LEAD FREE TYPE OR SN96 TYPE SOLDER.
3. SOLDER LEADS IN PLACE USING AN SN96 TYPE SOLDER WITH A CONTROLLED TEMPERATURE IRON (250°C).

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