

Description

The A16A50X4 is high performance Alumina (Al_2O_3) chip termination intended as a low cost alternative to Beryllium Oxide (BeO) and Aluminum Nitride (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

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)

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

Features:

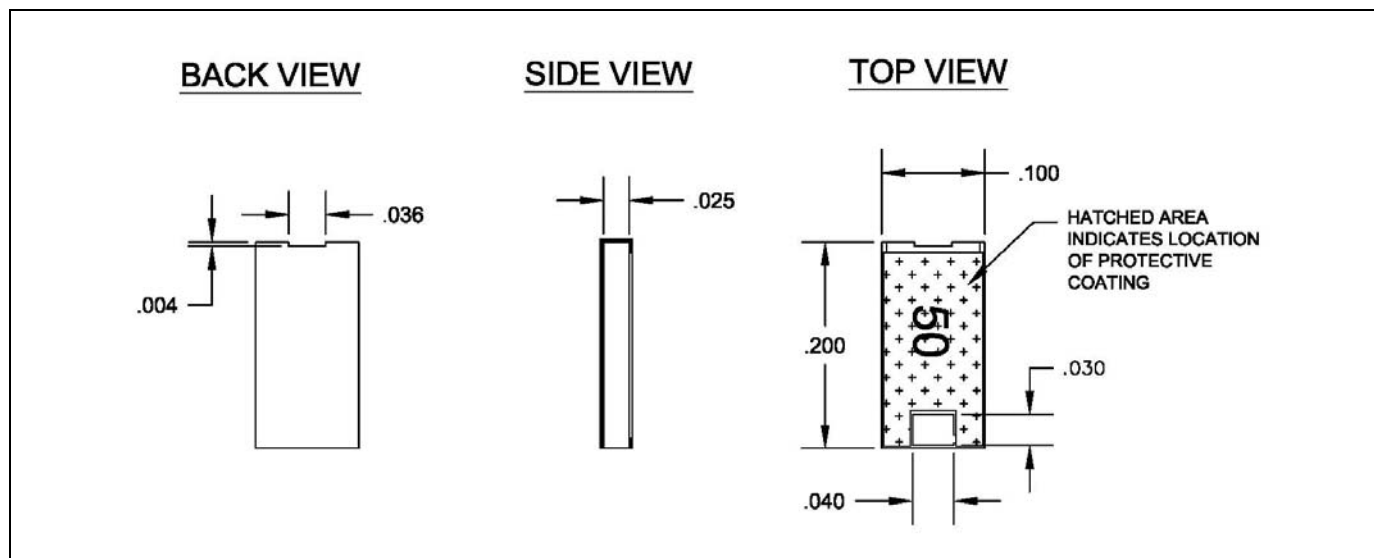
- RoHS Compliant
- 16 Watts
- DC – 4.0 GHz
- Al_2O_3 Ceramic
- Non-Nichrome Resistive Element
- Low VSWR
- 100% Tested
- Small Size

Electrical Specifications

Resistance Value:	50 Ohms, $\pm 2\%$
Power:	16 Watts
Frequency Range:	DC – 4.0 GHz
Return Loss	> 28 dB to 2.2 GHz > 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.**

Outline Drawing

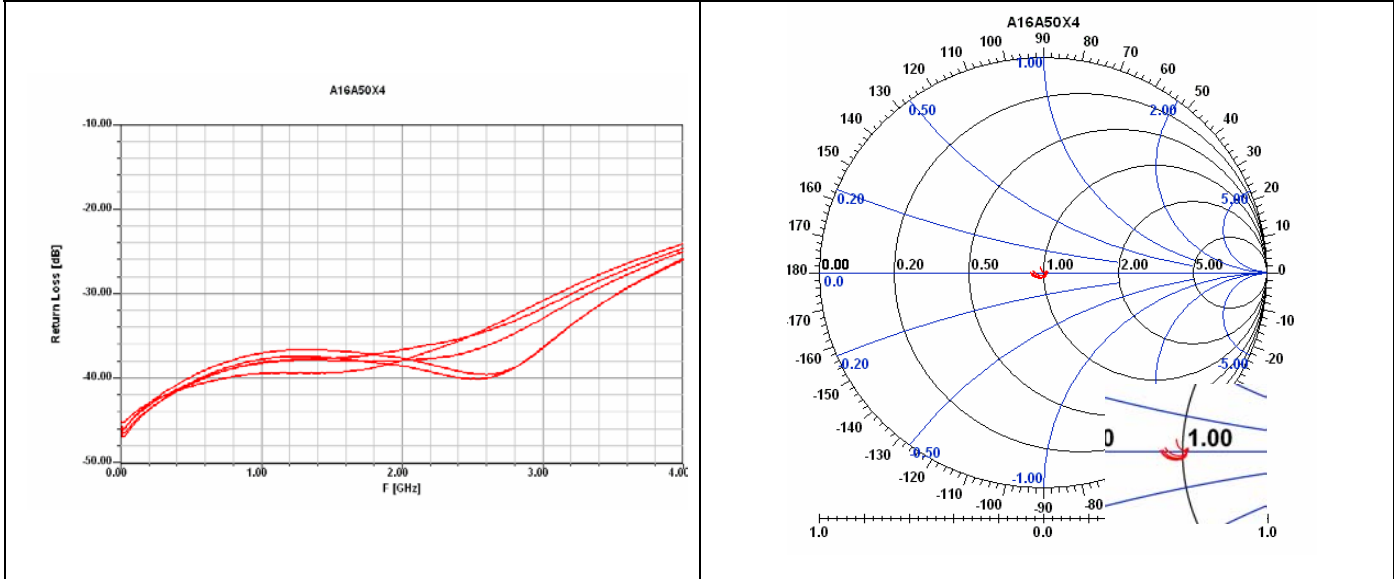


A16A50X4 (097) rev.E pg.1 of 2



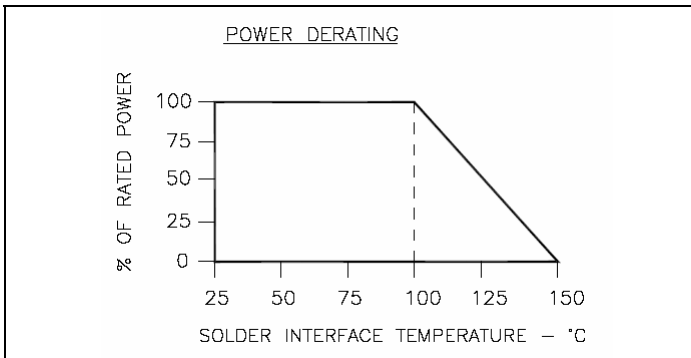


Typical Performance:



Power De-rating:

Tape & Reel:



Available upon request.

Mounting Footprint and Procedure:

The diagrams show two cross-sectional views of the device on a PCB. The left view shows the board lower than the lead, labeled 'SUGGESTED STRESS RELIEF METHODS' with a scale of NONE. The right view shows the board higher than the lead, labeled 'NOT RECOMMENDED APPLICATION' with a scale of NONE. A dimension of 0.25 MIN. (2 PLACES) is indicated for the lead height.

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).

Two 3D perspective views of the device are shown. The top view is labeled 'Alternative Lead Orientation (May Require External Matching)'. The bottom view is labeled 'Correct Lead Orientation'.

