

Half Flange Termination 100 Watts, 50Ω



Description

The J100N50X4B is high performance Aluminum Nitride (AlN) half flange termination intended as a cost competitive alternative to Beryllium Oxide (BeO). The termination is well suited to all cellular frequency bands such as; AMPS, GSM, DCS, PCS, PHS and UMTS. The high 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	AlN Ceramic
Mounting Flange	Copper, nickel plated per QC-N-290
Operating Temperature	-55°C 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

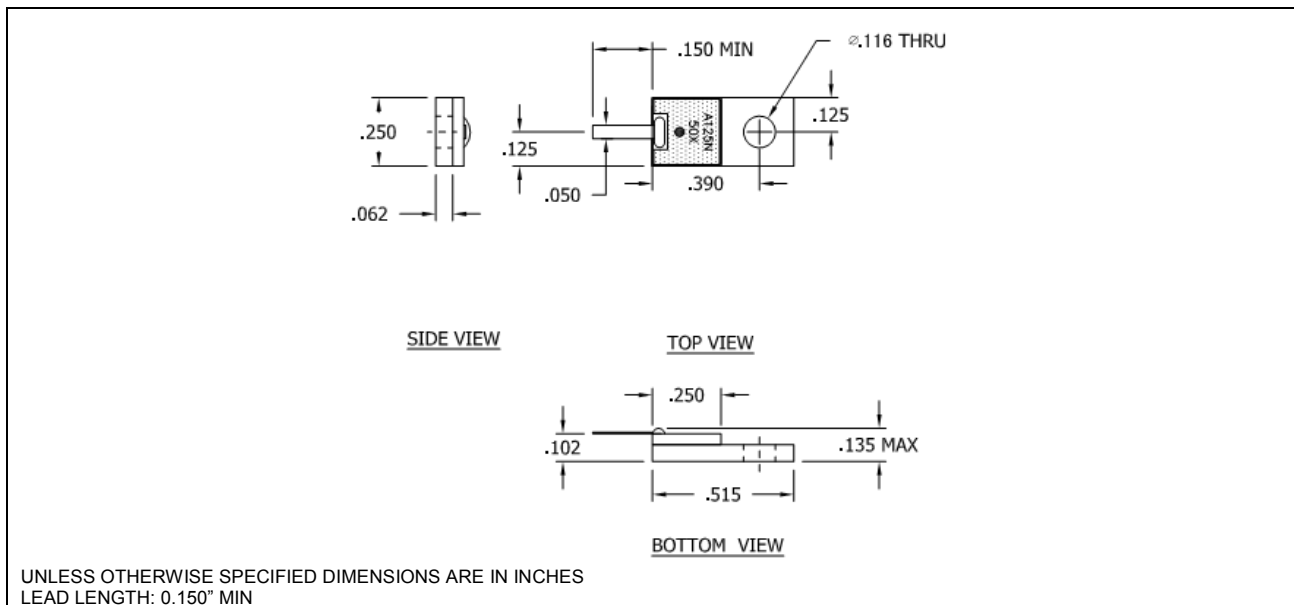
Resistance Value:	50 Ohms, $\pm 2\%$
Power:	100 Watts
Frequency Range:	DC – 4.0 GHz
Return Loss	> 26 dB to 1.3 GHz > 22 dB to 4.0GHz

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

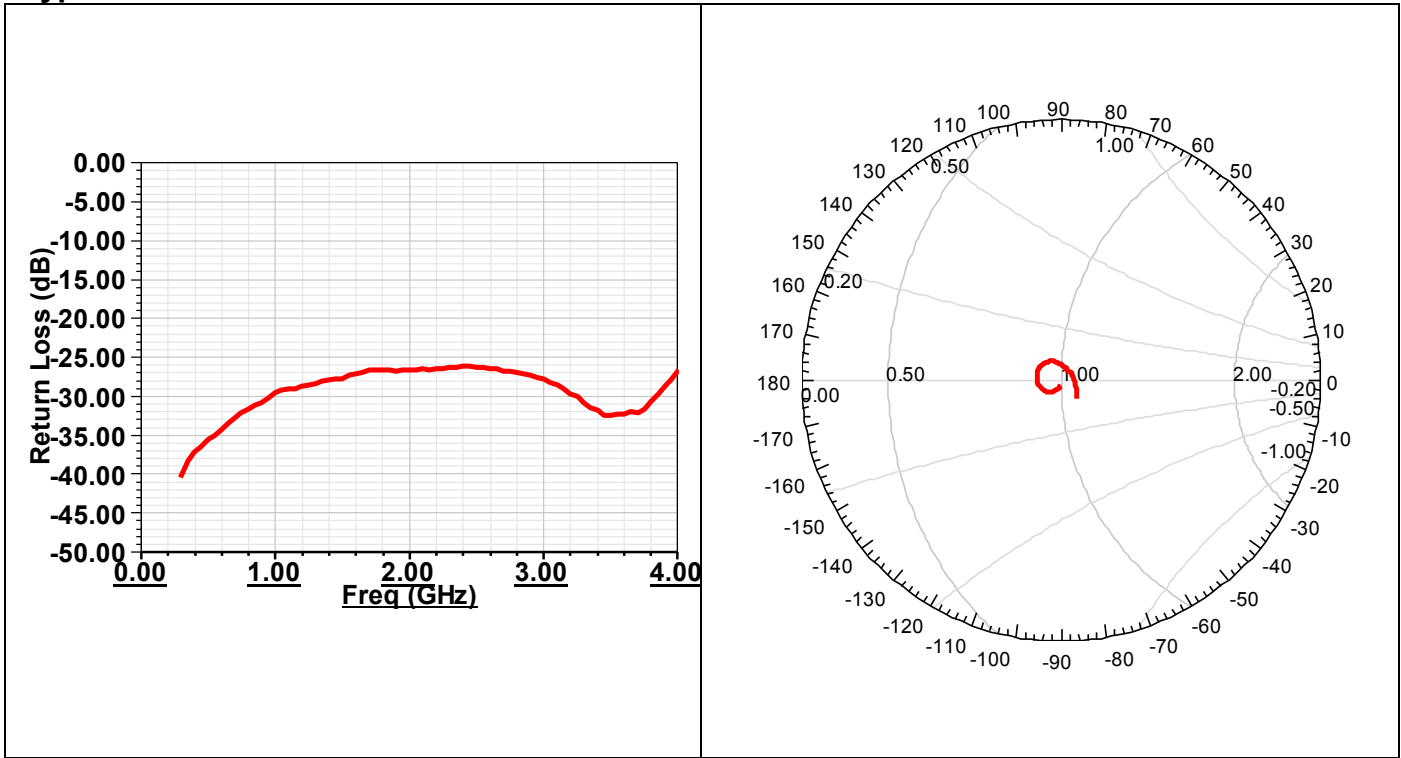
Features:

- RoHS Compliant
- 100 Watts
- DC – 4.0 GHz
- AlN Ceramic
- Non-Nichrome Resistive Element
- Low VSWR
- 100% Tested

Outline Drawing

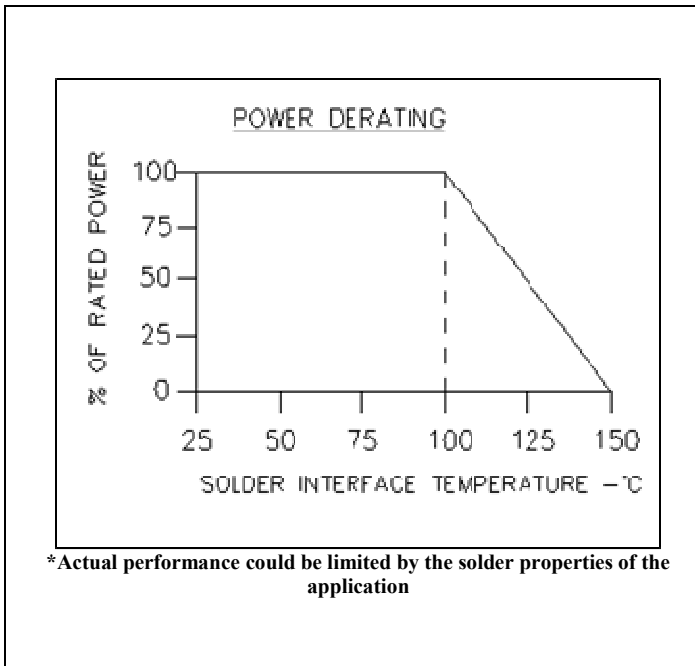


Typical Performance:



Power De-rating:

Mounting Footprint and Procedure:



The diagrams show two cross-sectional views of a component on a board. The left view shows a component with a .025 MIN (2 PLACES) gap between the component and the board, labeled "BOARD LOWER THAN LEAD. SUGGESTED STRESS RELIEF METHODS". The right view shows a component with no gap, labeled "BOARD HIGHER THAN LEAD. NOT RECOMMENDED APPLICATION".

SUGGESTED MOUNTING PROCEDURE

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 AN APPROPRIATE SOLDER.
3. SOLDER LEADS IN PLACE USING AN APPROPRIATE SOLDER TYPE WITH A CONTROLLED TEMPERATURE IRON.