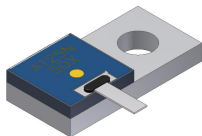


### Half Flange Termination 100 Watts, 50Ω



#### Description

The K100N50X4B 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

<b>Resistive Element</b>	Thick Film
<b>Substrate</b>	AlN Ceramic
<b>Mounting Flange</b>	Copper, nickel plated per QC-N-290
<b>Operating Temperature</b>	-55°C 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:

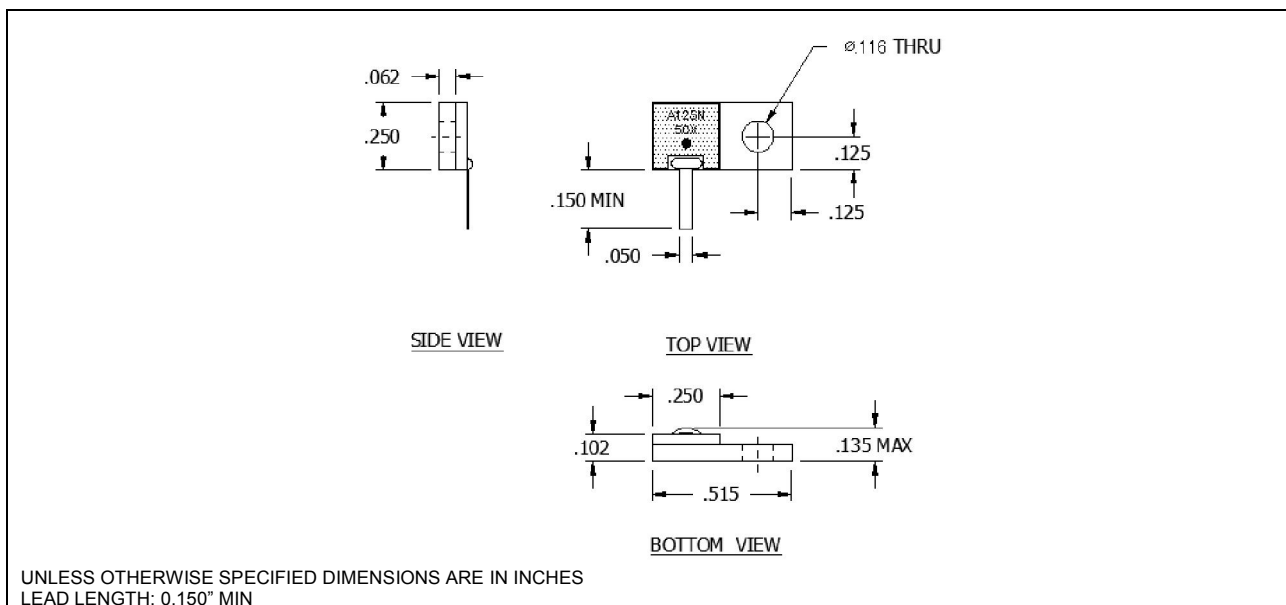
- RoHS Compliant
- 100 Watts
- DC – 4.0 GHz
- AlN Ceramic
- Non-Nichrome Resistive Element
- Low VSWR
- 100% Tested

#### Electrical Specifications

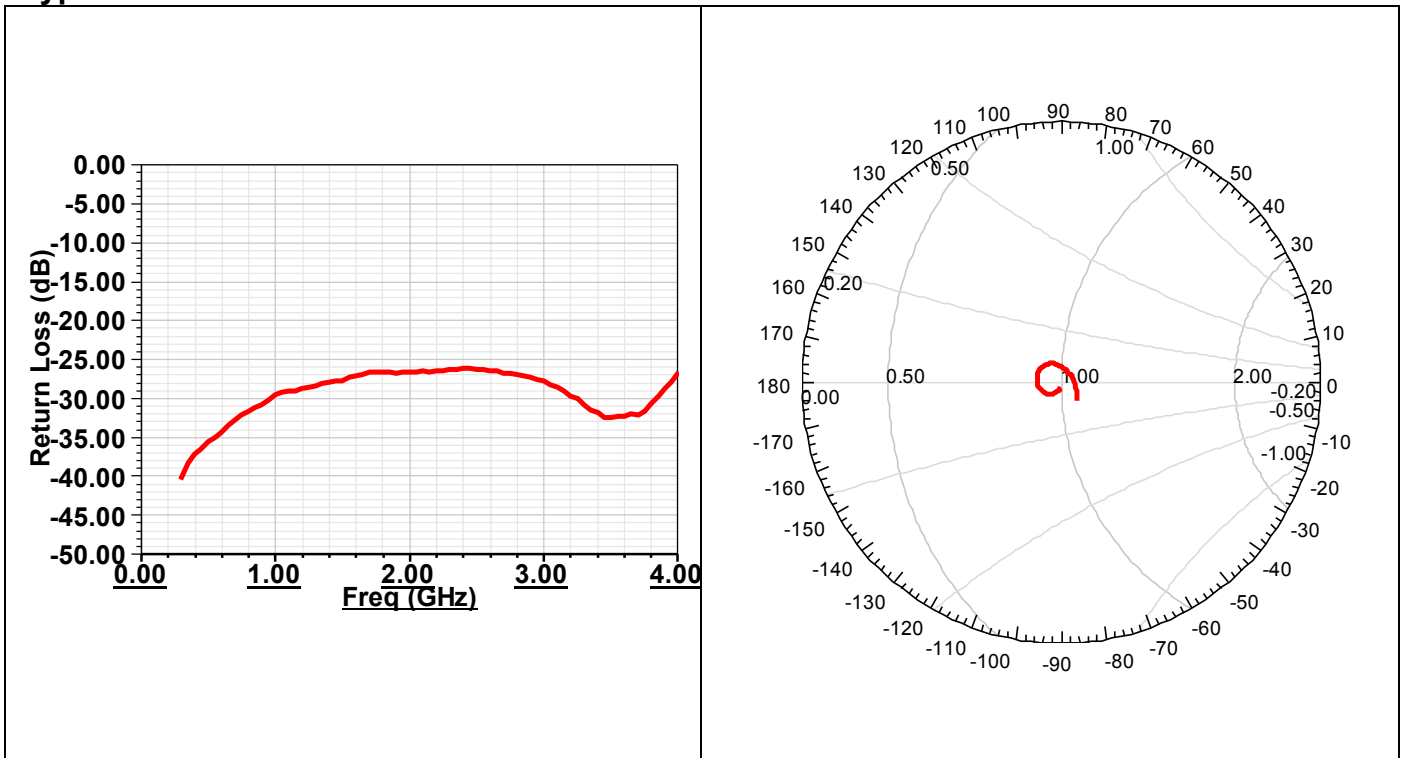
<b>Resistance Value:</b>	50 Ohms, ± 2%
<b>Power:</b>	100 Watts
<b>Frequency Range:</b>	DC – 4.0 GHz
<b>Return Loss</b>	> 26 dB to 1.3 GHz > 22 dB to 4.0GHz

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

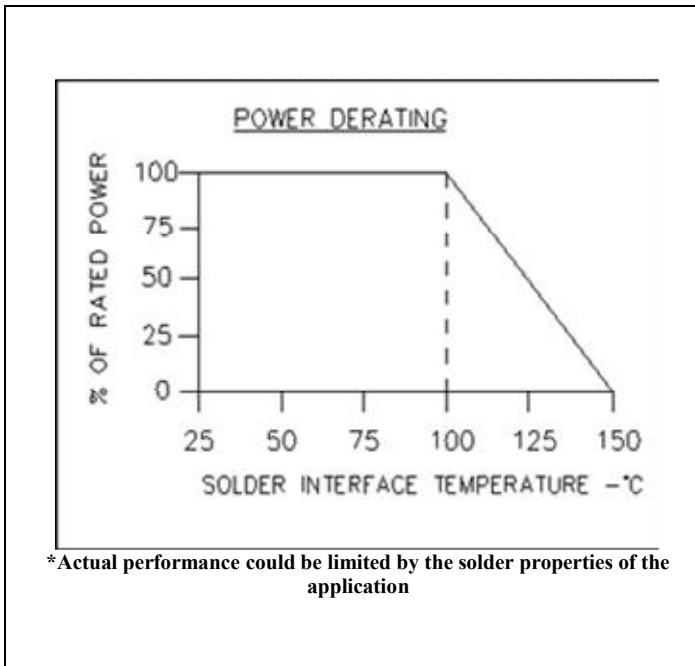
#### Outline Drawing



Typical Performance:



Power De-rating:



Mounting Footprint and Procedure:

The diagrams show two cross-sectional views of a component on a PCB. The left view shows a component with a .025 MIN (2 PLACES) gap between the component and the board. Below it are two sub-diagrams: "BOARD LOWER THAN LEAD" and "BOARD HIGHER THAN LEAD", both labeled "SUGGESTED STRESS RELIEF METHODS". The right view shows a component with no gap, labeled "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.