

**Chip Termination**  
**100 Watts, 50Ω**



### Description

The A100N50X4A is high performance Aluminum Nitride (AlN) chip termination intended as an 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>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>	100 Watts
<b>Frequency Range:</b>	DC – 3.5 GHz
<b>V.S.W.R.:</b>	1.12 : 1 DC – 3.0 GHz 1.22 : 1 DC – 3.5 GHz

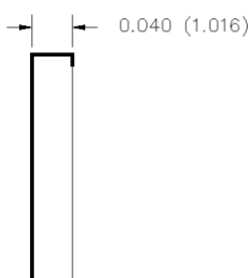
Specification based on unit properly installed using suggested mounting instructions and a 50 ohm nominal impedance. **Specifications subject to change.**

### Features:

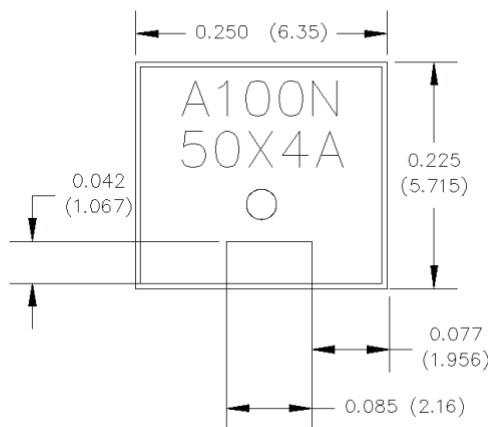
- RoHS Compliant
- 100 Watts
- DC – 3.5 GHz
- AlN Ceramic
- Non-Nichrome Resistive Element
- Low VSWR
- 100% Tested
- Small Size

### Outline Drawing

SIDE VIEW



TOP VIEW



All dimensions are in inches. (mm)

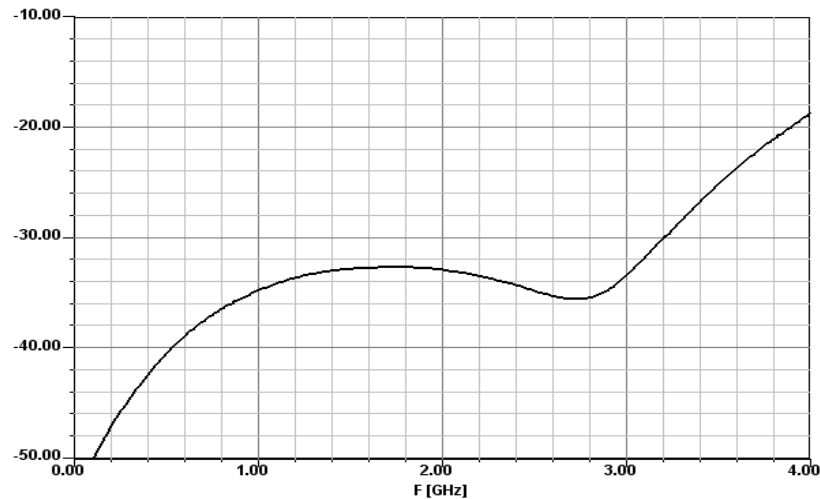
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## Typical Performance:

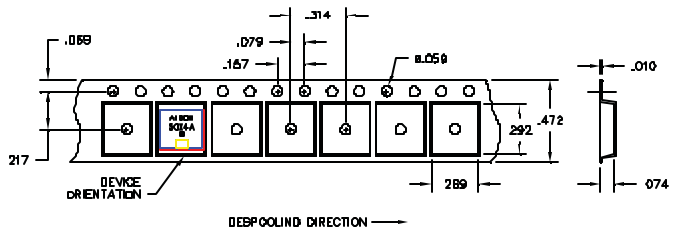
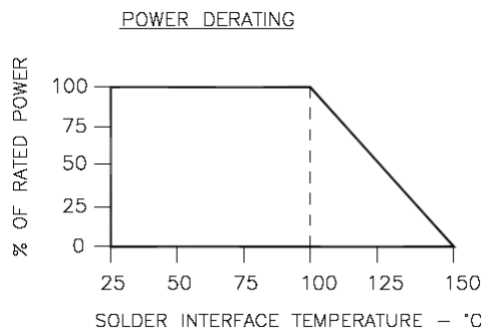
ROHS  
Compliant

RETURN LOSS  
A100N50X4A

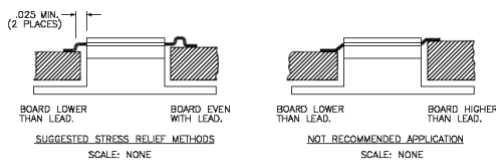


## Power De-rating:

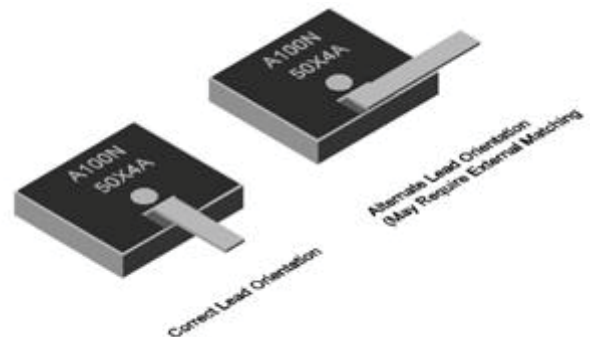
## Tape & Reel Available:



## Mounting Footprint and 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 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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