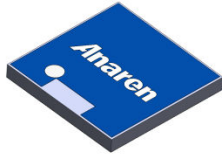


### Chip Termination 500 Watts, 50Ω

#### Description



The A500N50X4 is high performance Aluminum Nitride (AlN) chip termination intended as a cost competitive alternative to Beryllium Oxide (BeO). 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 +200°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.**

#### Features:

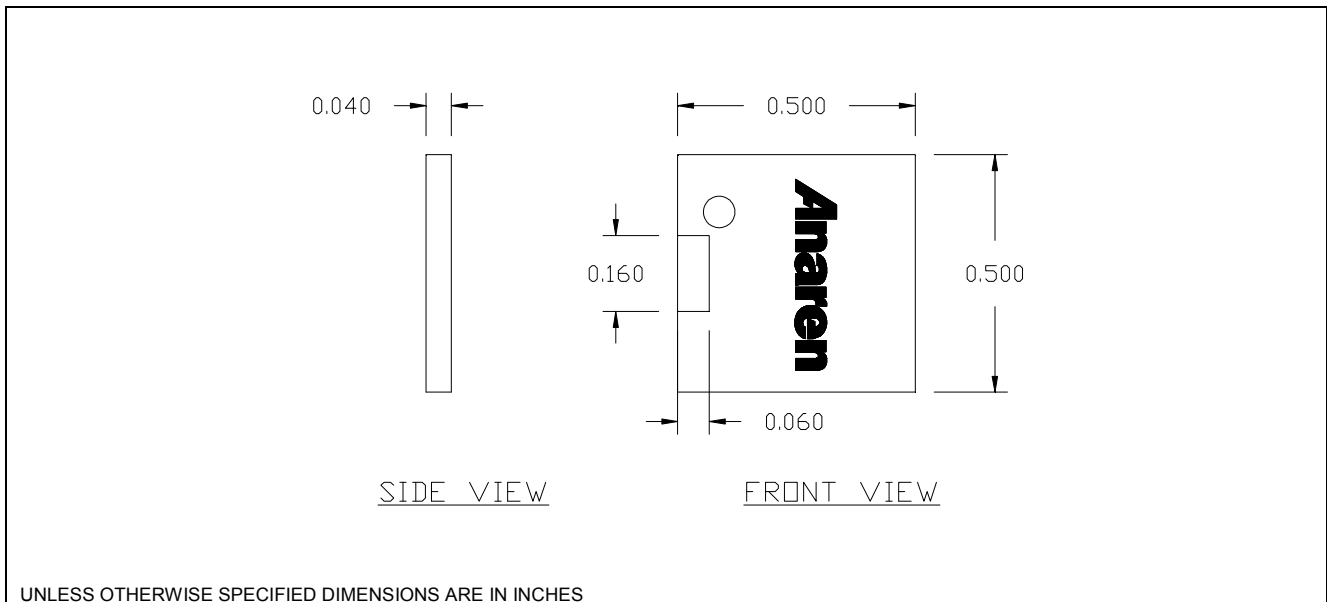
- RoHS Compliant
- 500 Watts
- DC – 1.7 GHz
- AlN Ceramic
- Non-Nichrome Resistive Element
- Low VSWR
- 100% Tested

#### Electrical Specifications

<b>Resistance Value:</b>	50 Ohms, $\pm 2\%$
<b>Power:</b>	500 Watts
<b>Frequency Range:</b>	DC – 1.7GHz
<b>Return Loss</b>	>20dB

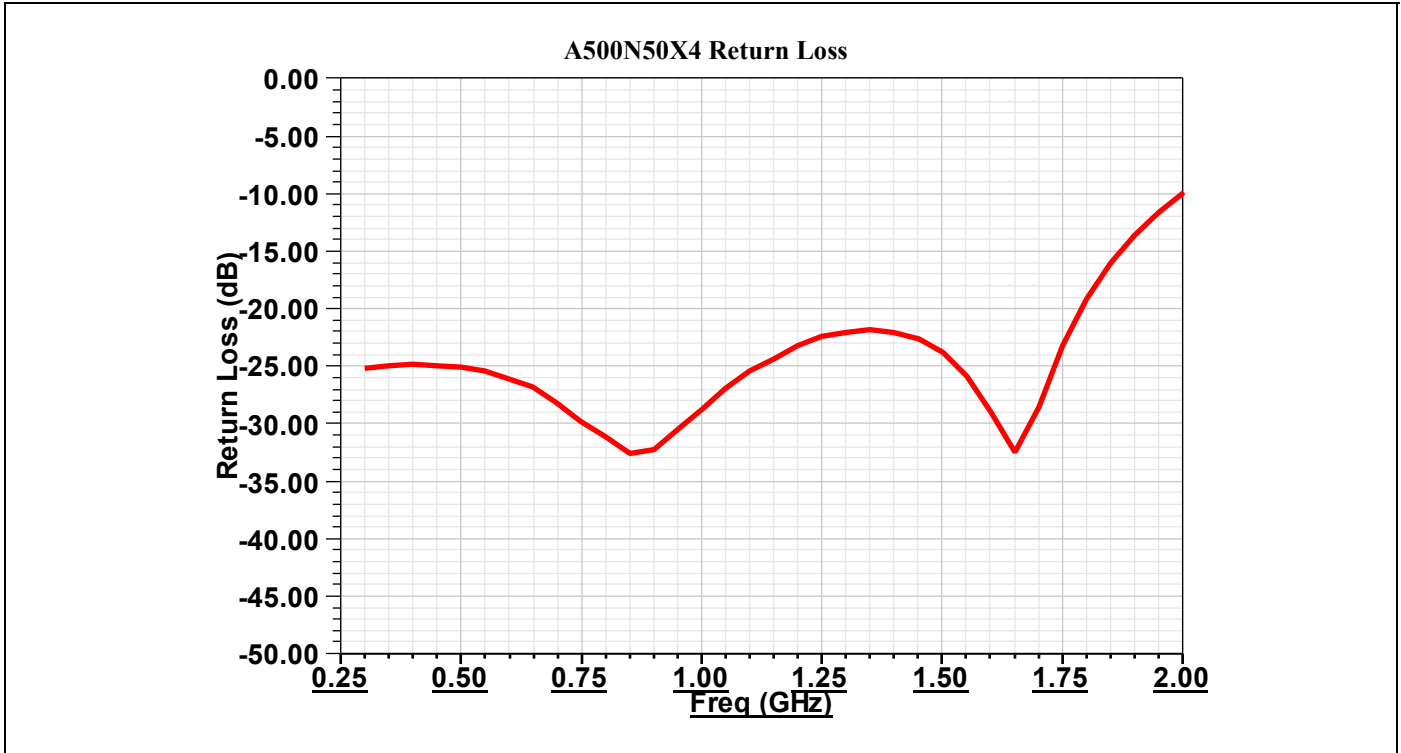
Specification based on unit properly installed using suggested mounting instructions and a 50 ohm nominal impedance. **Specifications subject to change.**

#### Outline Drawing

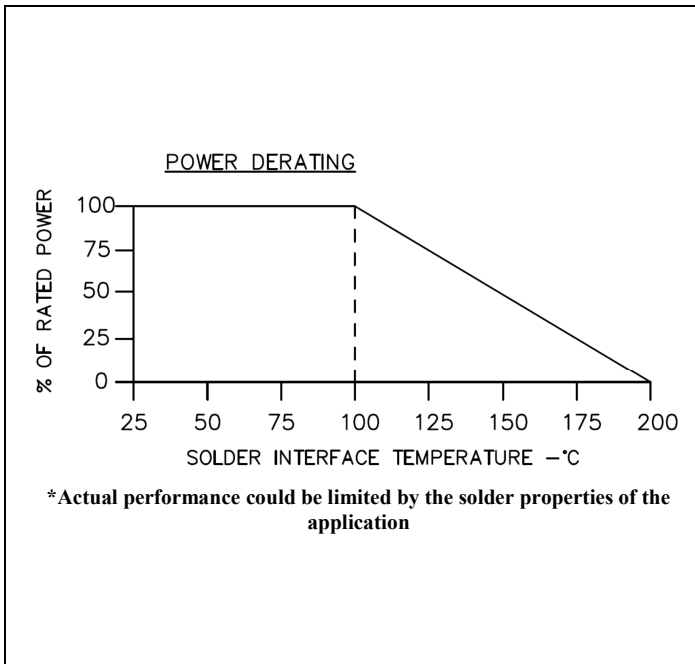


1 of 2

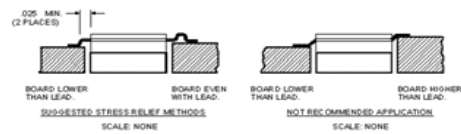
## Typical Performance:



## Power De-rating:



## Mounting Footprint and Procedure:



### 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.