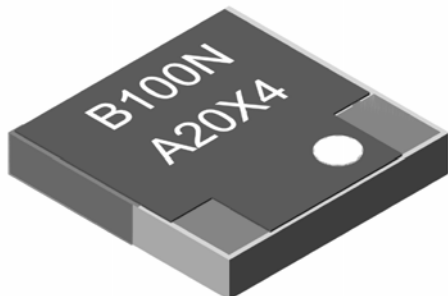




**ROHS  
Compliant**

**Chip Attenuator  
100 Watts, 20 dB**



### Description

The B100NA20X4 is high performance Aluminum Nitride (AlN) chip attenuator 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 monitoring. 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.

### Features:

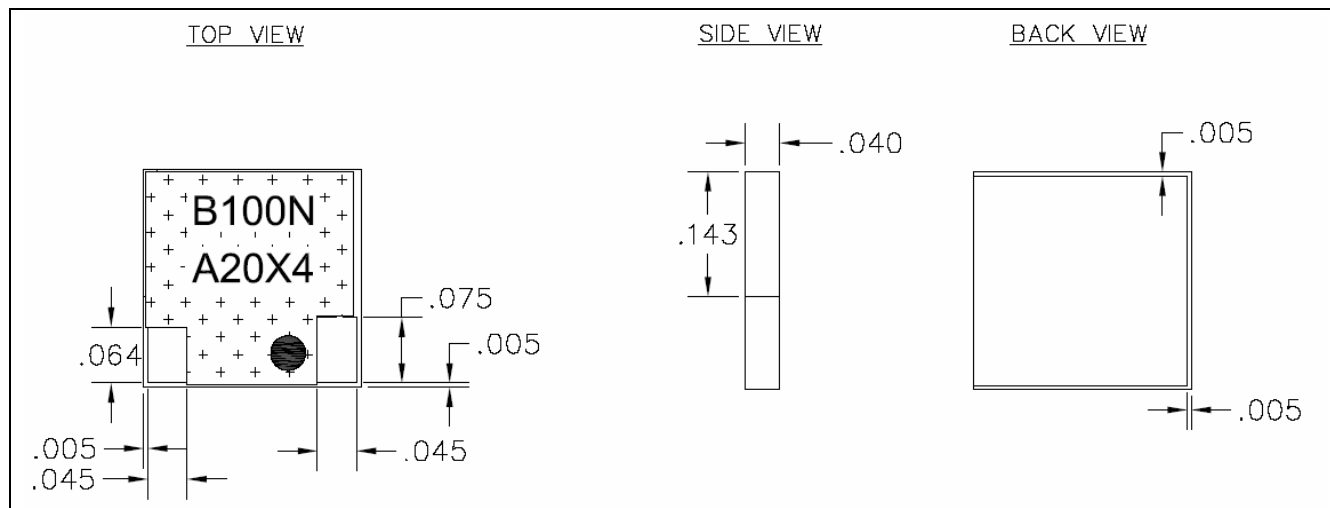
- RoHS Compliant
- 100 Watts
- DC – 4.0 GHz
- AlN Ceramic
- Non-Nichrome Resistive Element
- Low VSWR
- 100% Tested
- Small Size

### Electrical Specifications

<b>Attenuation Value:</b>	20 dB, $\pm 0.5$ dB, DC – 4.0 GHz
<b>Power:</b>	100 Watts
<b>Frequency Range:</b>	DC – 4.0 GHz
<b>Return Loss</b>	>26 dB to 2.7 GHz >24 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.**

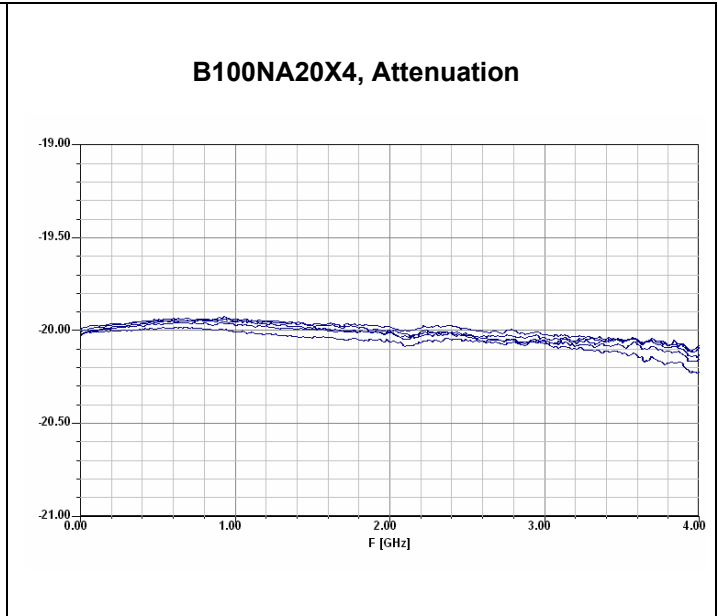
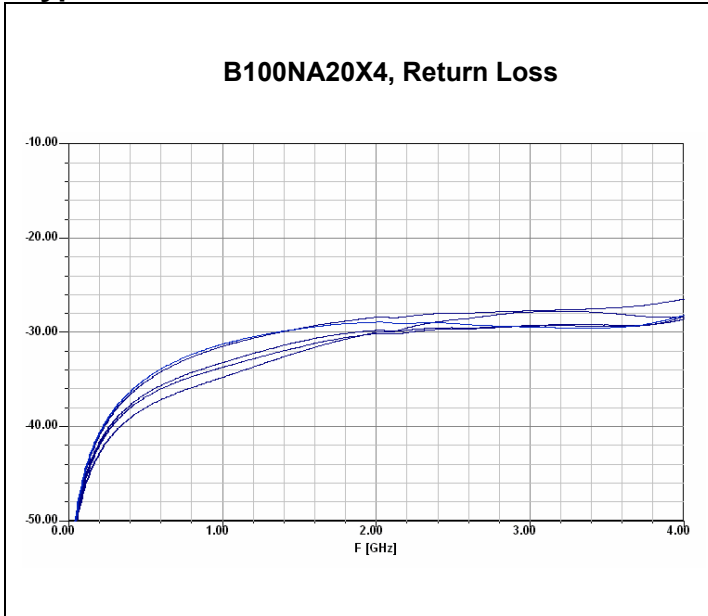
### Outline Drawing



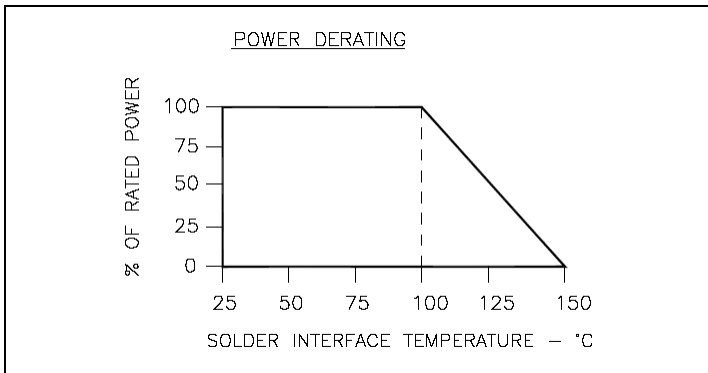
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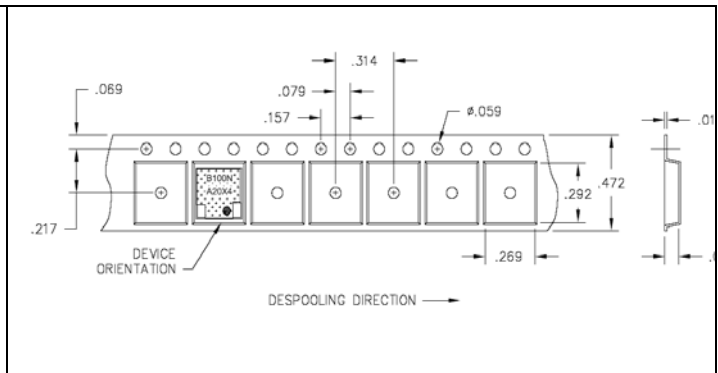
### Typical Performance:



### Power De-rating:



### Tape & Reel:



### Mounting Footprint and Procedure:

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**SUGGESTED MOUNTING PROCEDURES:**

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 SN96 SOLDER.
3. SOLDER LEADS IN PLACE USING AN SN96 TYPE SOLDER WITH A CONTROLLED TEMPERATURE IRON (260°C).

**Correct Lead Orientation**      **Alternate Lead Orientation (May Require External Matching)**

