



**ROHS
Compliant**

**Chip Attenuator
100 Watts, 30 dB**



Description

The B100NA30X4 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

Resistive Element	Thick film
Substrate	AlN Ceramic
Terminal Finish	Matte Tin over Nickel Barrier
Operating Temperature	-55 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:

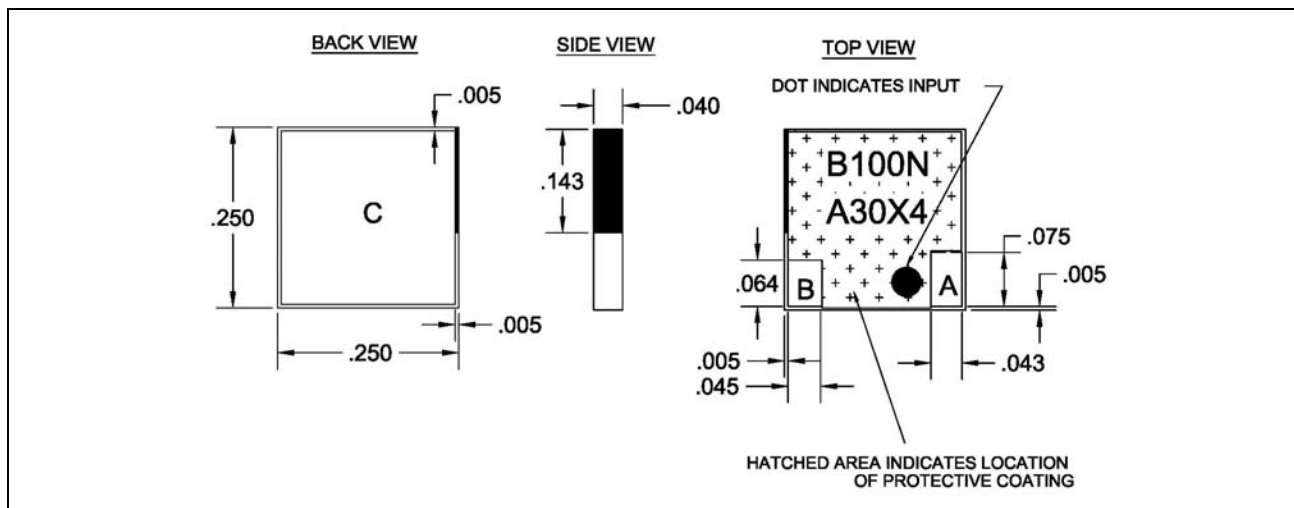
- RoHS Compliant
- 100 Watts
- DC - 2.7 GHz
- AlN Ceramic
- Non-Nichrome Resistive Element
- Low VSWR
- 100% Tested
- Small Size

Electrical Specifications

Attenuation Value:	30 dB \pm 1.0 dB, DC – 1.5 GHz 30 dB \pm 2.5 dB, 1.5GHz – 2.5GHz
Power:	100 Watts
Frequency Range:	DC – 2.7 GHz
Return Loss:	>24 dB to 2.2 GHz >20 dB to 2.7GHz

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

Outline Drawing



B100NA30X4 (097) rev.D pg.1 of 2

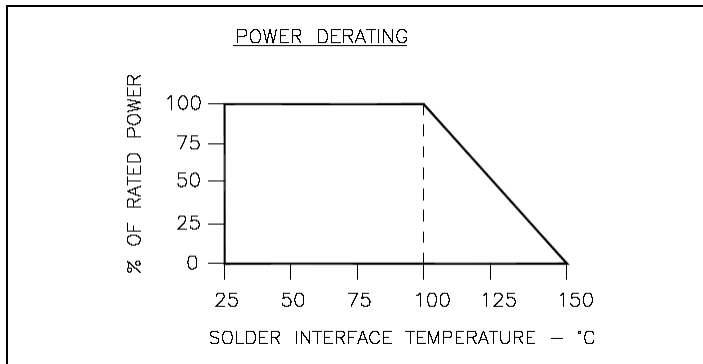


Specifications:

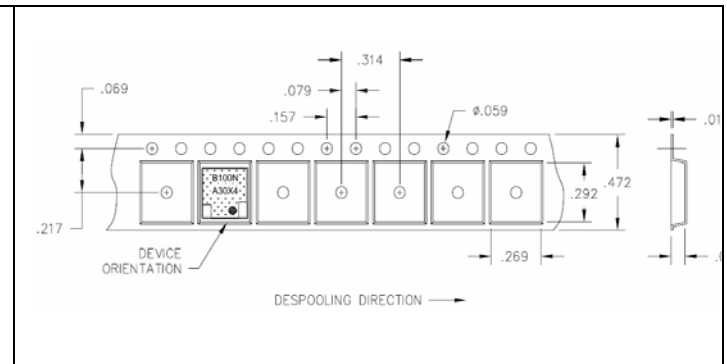
ATTENUATION SPECIFICATION	
Attenuation	Frequency
30dB \pm 1.0dB	DC – 1.5GHz
30dB \pm 2.5dB	1.5GHz – 2.7GHz

RESISTOR VALUE CHART				
Attenuation	Value (A – B)	Value (A – C)	Value (B – C)	Tolerance
30dB	93.5 Ω	49.9 Ω	49.9 Ω	\pm 4%

Power De-rating:



Tape & Reel:



Mounting Footprint and Procedure:

BOARD LOWER THAN LEAD.
SUGGESTED STRESS RELIEF METHODS
SCALE: NONE

BOARD EVEN WITH LEAD.
NOT RECOMMENDED APPLICATION
SCALE: NONE

Correct Lead Orientation

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

SUGGESTED MOUNTING PROCEDURES:

1. MAKE SURE THAT THE DEVICES ARE MOUNTED ON FLAT SURFACES (.001" UNDER THE DEVICE) TO OPTIMIZE THE HEAT TRANSFER.
2. SOLDER LEADS IN PLACE USING A HIGH TYPE SOLDER WITH A CONTROLLED TEMPERATURE IRON.
3. POSITION DEVICE ON MOUNTING SURFACE AND SOLDER IN PLACE USING SN96 SOLDER.

B100NA30X4 (097) rev.D pg.2 of 2

