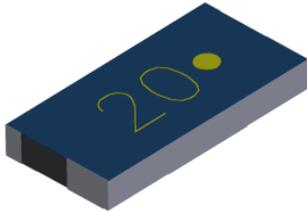


### Surface Mount Attenuator 30 Watts, 20dB



The D30NA20Z4 is a high performance Aluminum Nitride (AlN) chip attenuator intended as a cost competitive alternative to Beryllium Oxide (BeO). The attenuator 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 inter-stage matching, directional couplers, and for use in isolators. The attenuator is also RoHS compliant!

#### Features:

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

#### 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)

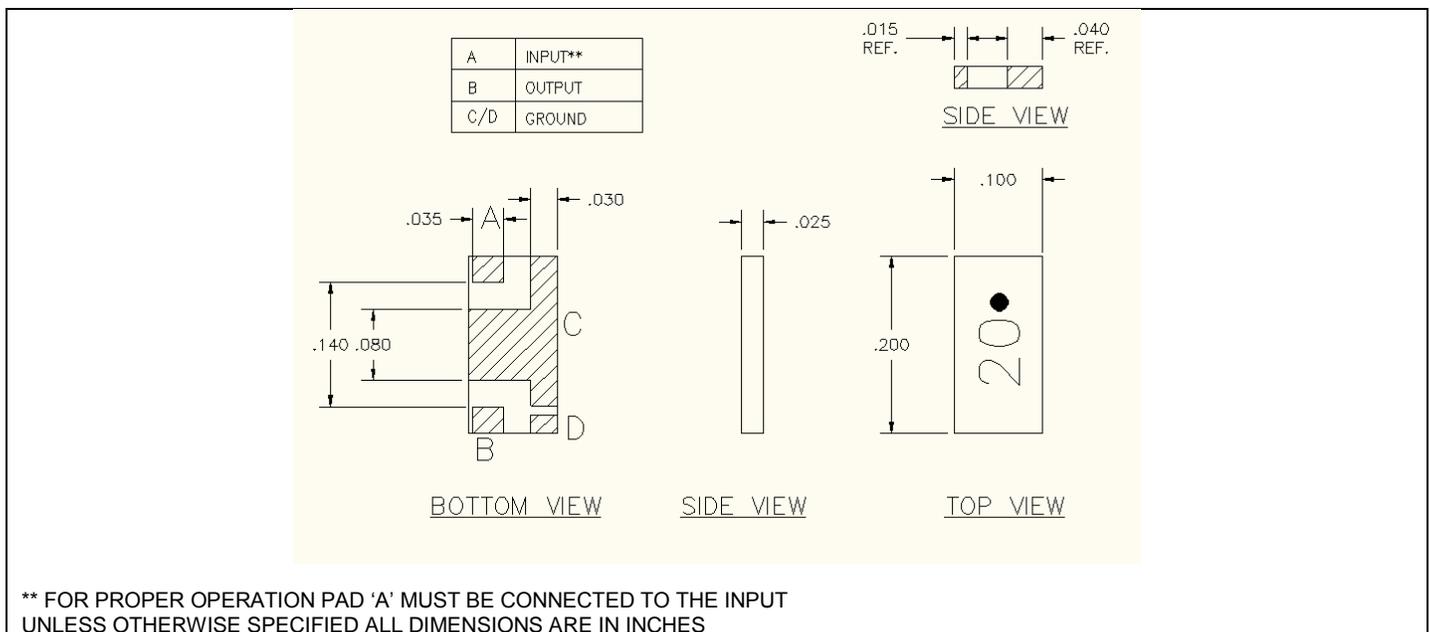
Tolerance is  $\pm 0.010$ ", unless otherwise specified. Designed to meet or exceed applicable portions of MIL-E-5400. **All dimensions in inches.**

#### Electrical Specifications

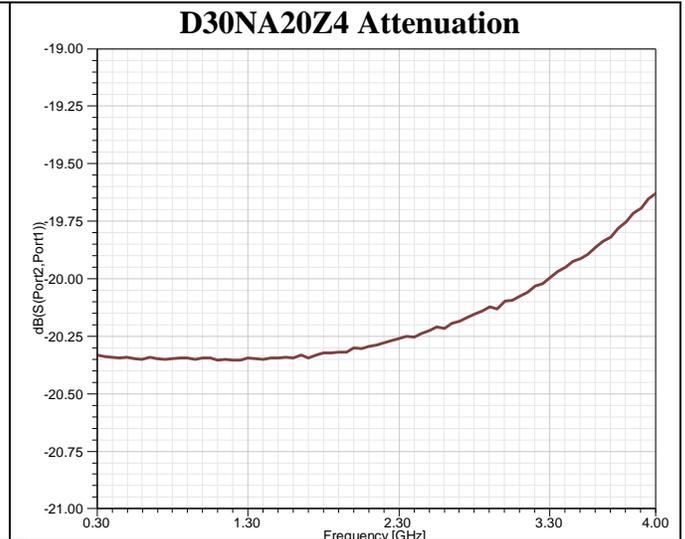
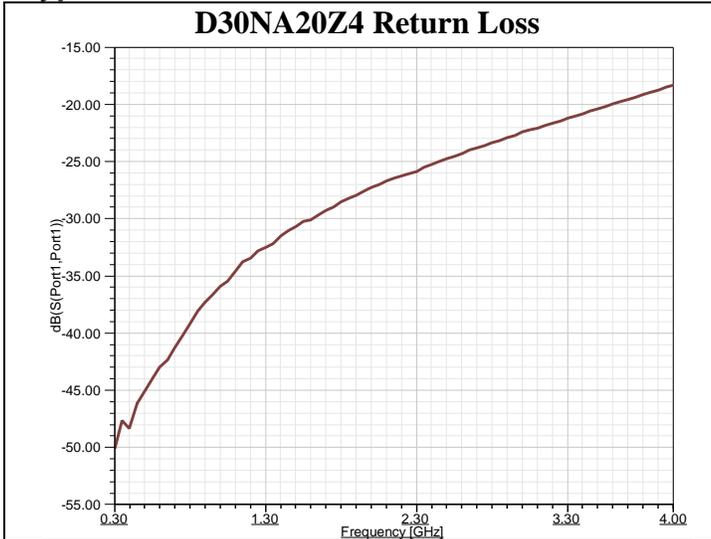
<b>Attenuation Value:</b>	20.2dB +/- .4dB; DC – 3.0GHz
	20.0dB +/- .6dB; 3.0 – 4.0GHz
<b>Power:</b>	30 Watts
<b>Frequency Range:</b>	DC – 4.0GHz
<b>Input Return Loss:</b>	20dB DC - 3.0GHz
	16dB 3.0 – 4.0GHz

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

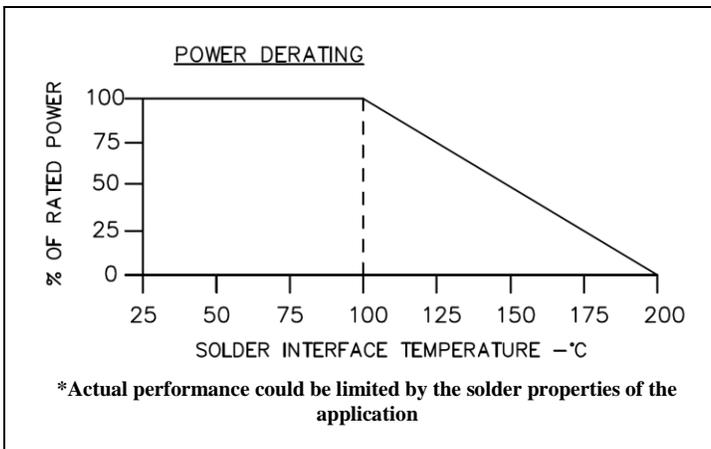
#### Outline Drawing



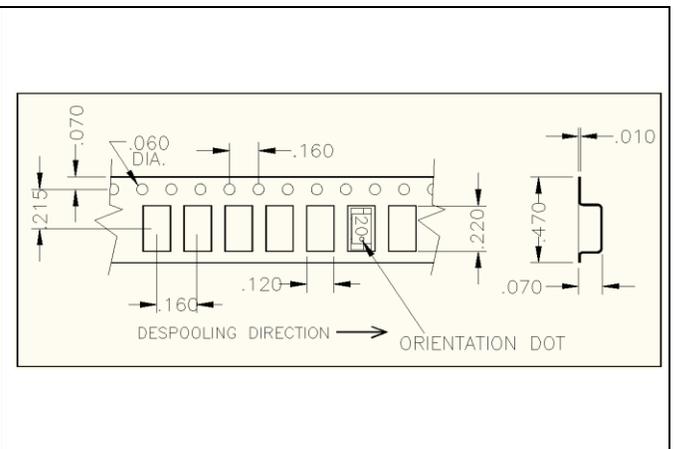
### Typical Performance:



### Power De-rating:



### Tape and Reel:



### Mounting Footprint:

Dimension given in inches.  
For best thermal performance the PCB should be placed with thermal joint compound to the heat sink.

**MOUNTING PROCEDURE**

1. DRILL THERMAL VIA THROUGH PCB AND FILL WITH SOLDER, SUCH AS Sn88.
2. SOLDER PART IN PLACE USING Sn88 TYPE SOLDER WITH A CONTROLLED TEMPERATURE IRON (250°C)
3. TO ENSURE GOOD THERMAL CONNECTIVITY TO HEAT SINK, DRILL AND TAP HEAT SINK AND MOUNT PCB BOARD TO HEAT SINK USING SCREWS.