

### Surface Mount Attenuator 30 Watts, 30dB



The D30NA30Z4 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 – 3.0GHz
- 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)

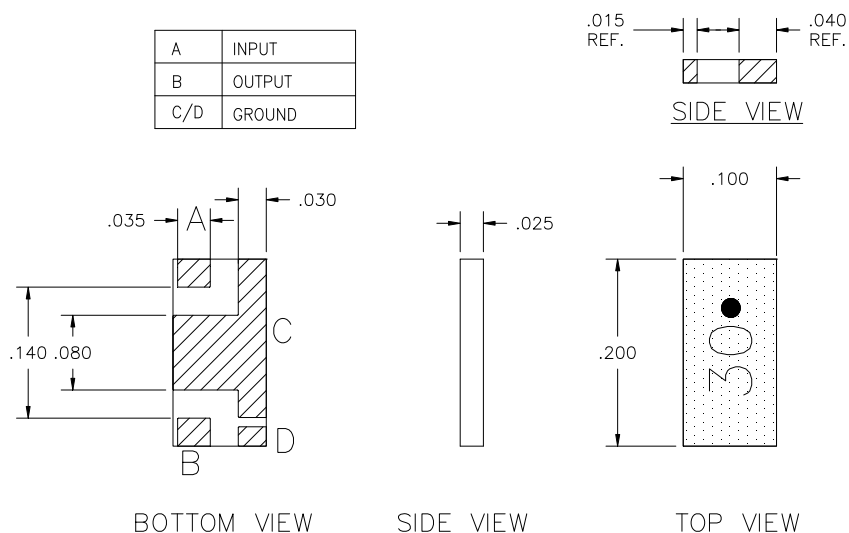
Tolerance is  $\pm 0.010"$ , unless otherwise specified. Designed to meet or exceed applicable portions of MIL-E-5400. **All dimensions in inches.**

#### Electrical Specifications

<b>Attenuation Value:</b>	30dB	+1dB, -1dB; DC – 2.7GHz +1dB, -1.5dB; DC – 3.0GHz
<b>Power:</b>	30 Watts	
<b>Frequency Range:</b>	DC – 3.0GHz	
<b>Input Return Loss:</b>	20dB	

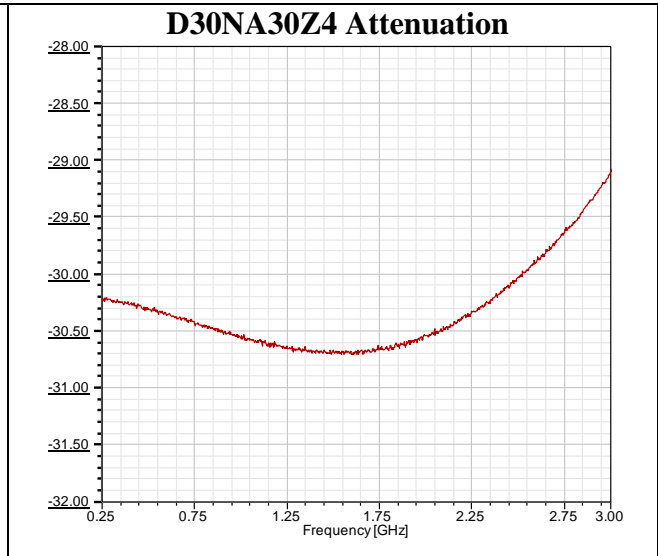
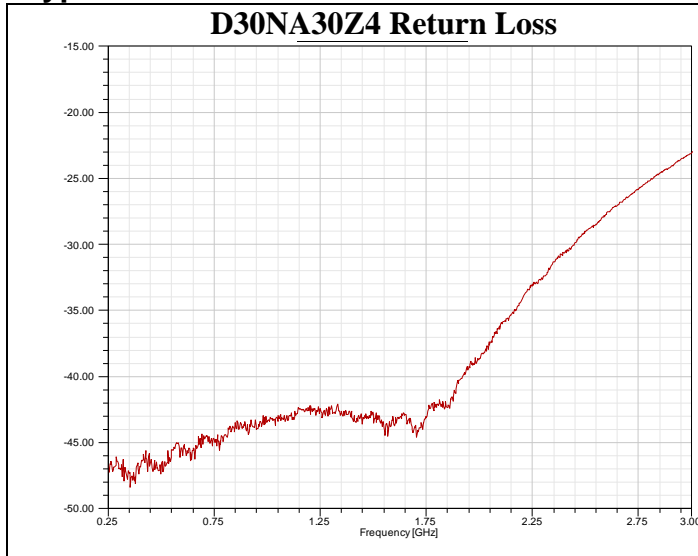
Specification based on unit properly installed using suggested mounting instructions and a 50 ohm nominal impedance. **Specifications subject to change.**

#### Outline Drawing

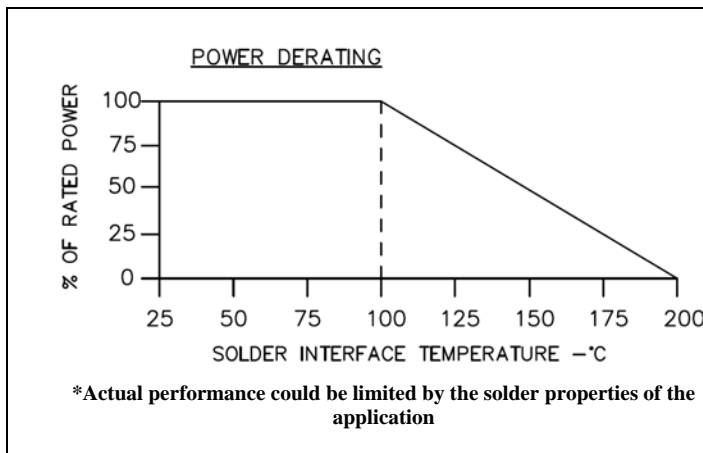


UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

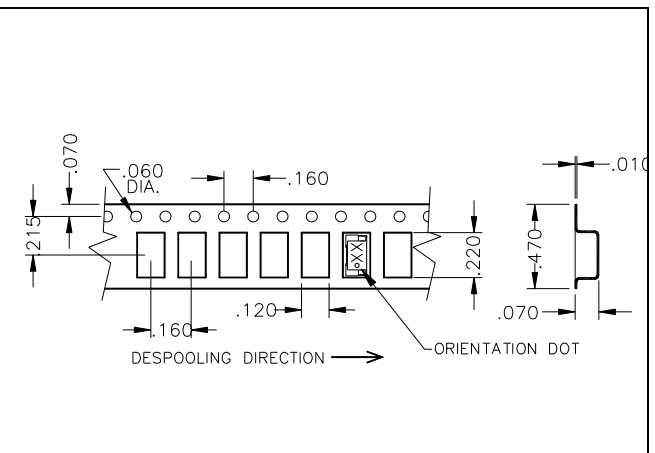
## Typical Performance:



## Power De-rating:



## Mounting Footprint:



## Tape and Reel:

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 (280°C).
3. TO ENSURE GOOD THERMAL CONNECTIVITY TO HEAT SINK, DRILL AND TAP HEAT SINK AND MOUNT PCB BOARD TO HEAT SINK USING SCREWS.