

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

Resistive Element	Thick film
Substrate	AlN Ceramic
Terminal Finish	Matte Tin over Nickel Barrier
Operating Temperature	-55 to +200°C (see de rating chart)

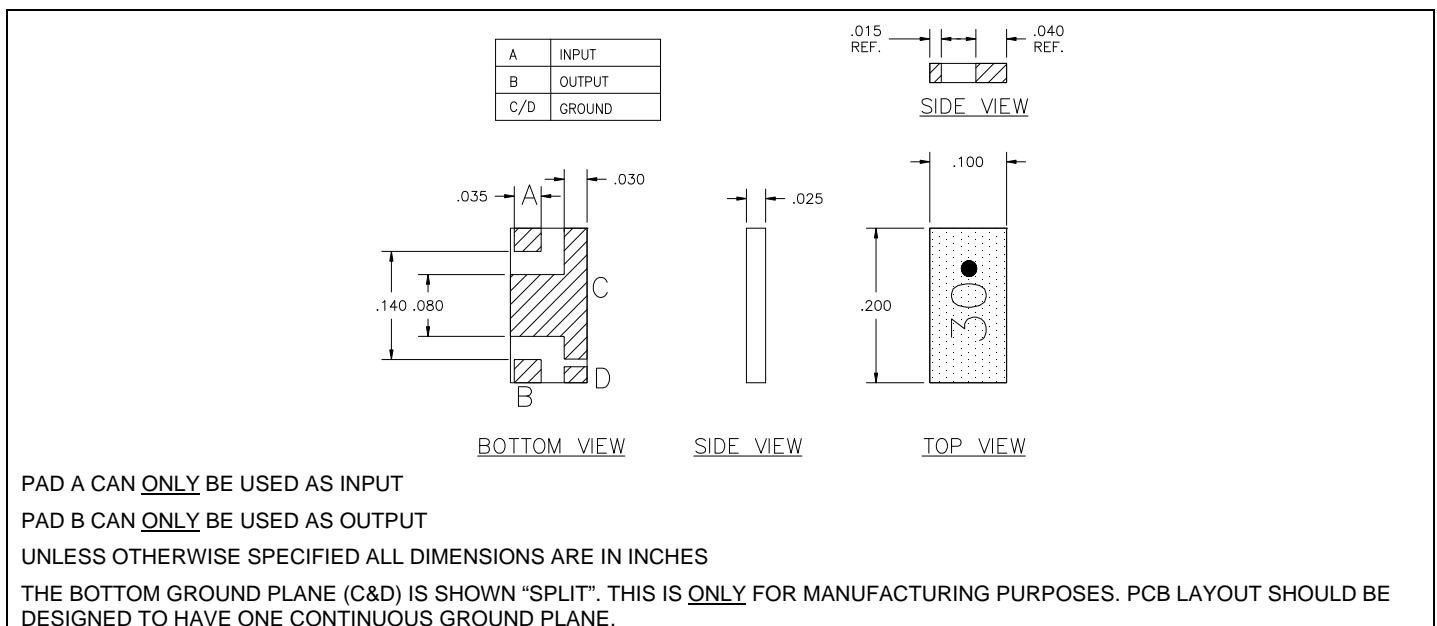
Tolerance is $\pm 0.010"$, unless otherwise specified. Designed to meet or exceed applicable portions of MIL-E-5400. **All dimensions in inches.**

Electrical Specifications

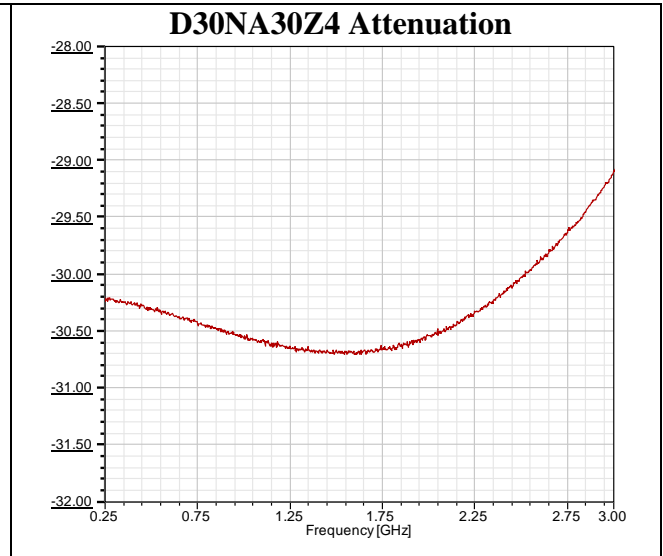
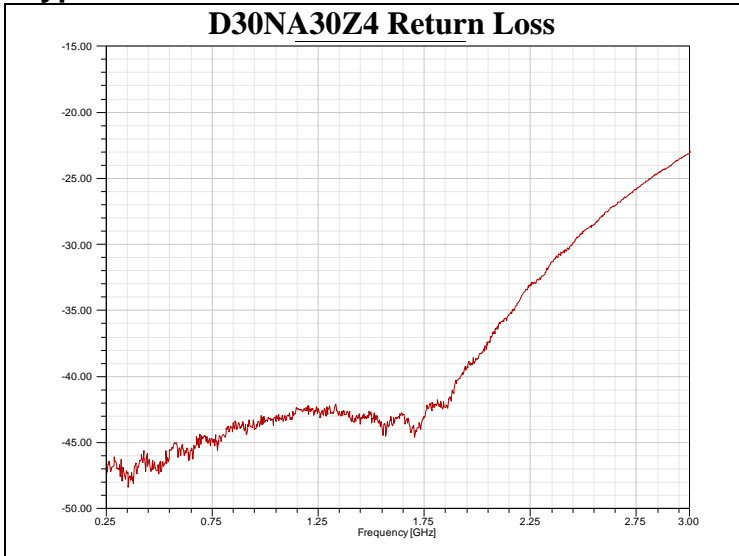
Attenuation Value:	30dB	+1dB, -1dB; DC – 2.7GHz +1dB, -1.5dB; DC – 3.0GHz
Power:	30 Watts	
Frequency Range:	DC – 3.0GHz	
Input Return Loss:	20dB	

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

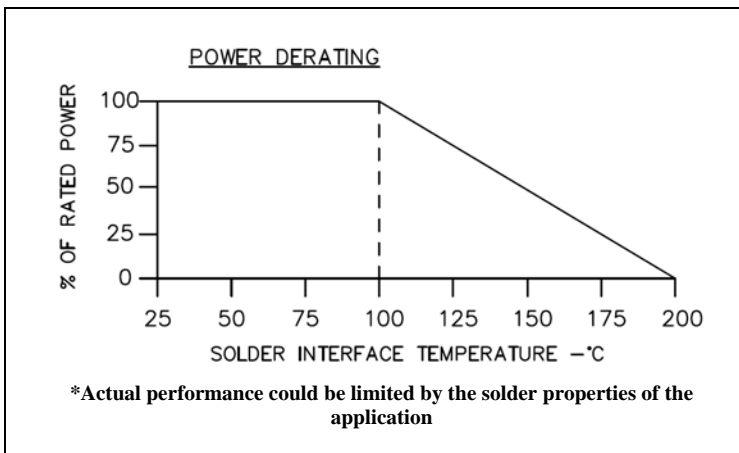
Outline Drawing



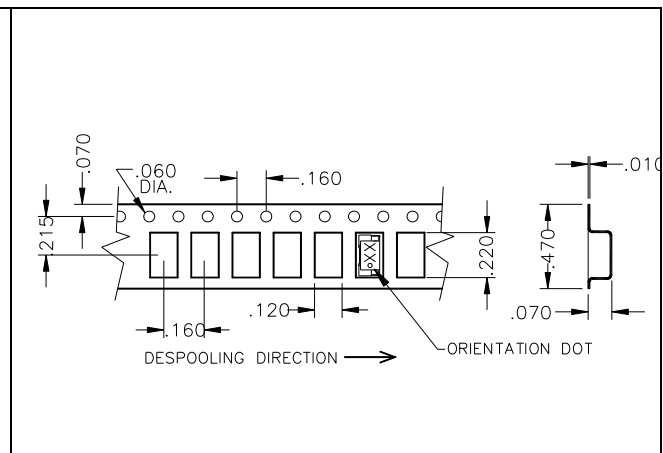
Typical Performance:



Power De-rating:



Mounting Footprint:



Tape and Reel:

The diagram shows the PCB dimensions for tape and reel mounting. Key dimensions include: a .034 inch typical thickness, a .241 inch length, a .131 inch width, and a 50 ohm line. It also shows a .068 inch diameter hole, a .034 inch spacing, and a 2x 2-56 Screw Hole.

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 Sn98.
2. SOLDER PART IN PLACE USING Sn98 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.