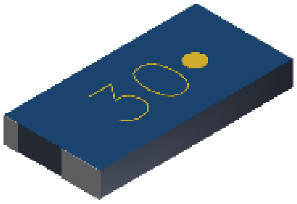
Surface Mount Attenuator
30 Watts, 30dB



Features:

- **RoHS Compliant**
- **30 Watts**
- **Low Cost**
- **DC – 4.2 GHz**
- **AIN Ceramic**
- **Non-Nichrome Resistive Element**
- **Low VSWR**
- **100% Tested**

Description:

The D30NA30Z4 is a high performance Aluminum Nitride (AIN) 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!

General Specifications:

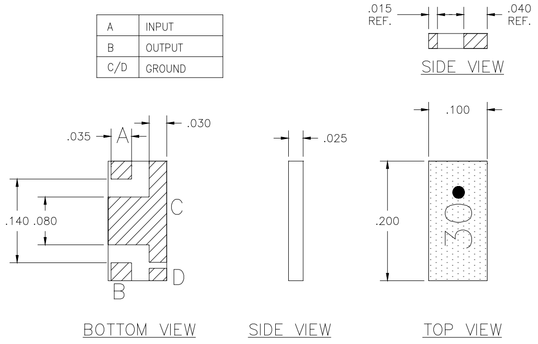
Resistive Element	Thick film
Substrate	AIN Ceramic
Terminal Finish	Matte Tin over Nickel Barrier
Operating Temperature	-55 to +200°C (see de rating chart)

Electrical Specifications:

Attenuation Value:	30B	+1dB, -1dB;	DC – 2.7GHz
		+1dB, -1.5dB,	2.7 – 3.0GHz
	28dB	+2dB, -2dB,	3.0 – 4.2GHz
Power:	30 Watts		
Frequency Range:	DC – 4.2GHz		
Input Return Loss:	20dB		DC – 3.0 GHz
	16dB		3.0 – 4.2 GHz

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

Outline Drawing:

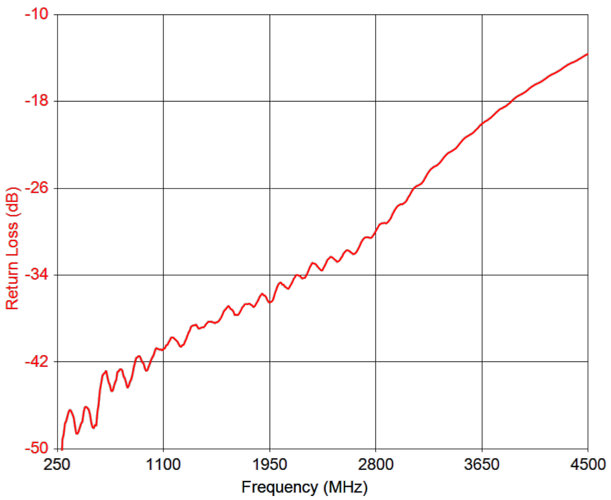


Pad a can only be used as input, pad b can only be used as output

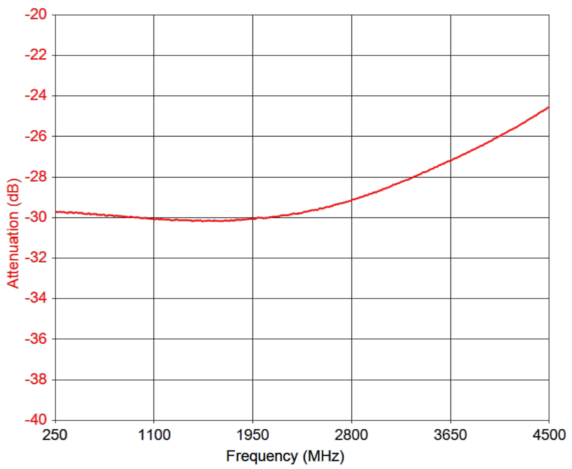
The bottom ground plane (c&d) is shown “split”. This is only for manufacturing purposes. Pcb layout should be designed to have one continuous ground plane.
Tolerance is ±0.010”, unless otherwise specified. **All dimensions in inches.**

Typical Performance:

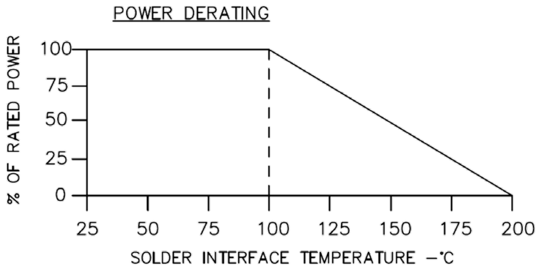
Return loss:



Attenuation

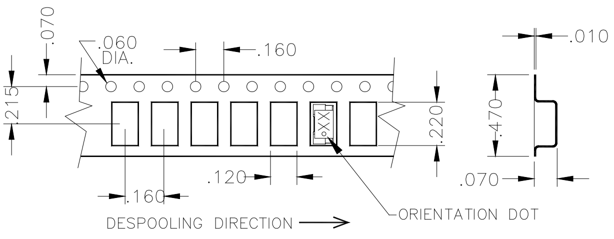


Power de-rating:

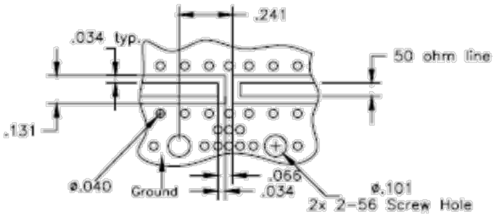


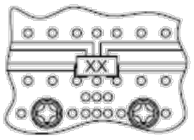
***Actual performance could be limited by the solder properties of the application**

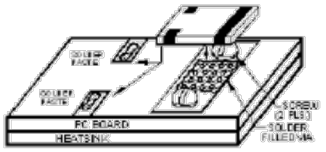
Tape & Reel:



Mounting Footprint:







MOUNTING PROCEDURE

1. DRILL THERMAL VIAS THROUGH PCB AND FILL WITH SOLDER, SUCH AS Sn96.
2. SOLDER PART IN PLACE USING Sn96 TYPE SOLDER WITH A CONTROLLED TEMPERATURE IRON (260°C)
3. TO ENSURE GOOD THERMAL CONNECTIVITY TO HEAT SINK, DRILL AND TAP HEATSINK AND MOUNT PCB BOARD TO HEATSINK USING SCREWS.

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

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