

### Surface Mount Attenuator 30 Watts, 30dB



The XRA30AA30SES is a high performance Aluminum Nitride (AlN) chip attenuator intended as a cost competitive alternative to Beryllium Oxide (BeO). It is designed particularly for LTE and 5G wireless communication frequency bands. 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 – 6.0GHz
- 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 +150°C (see de rating chart)

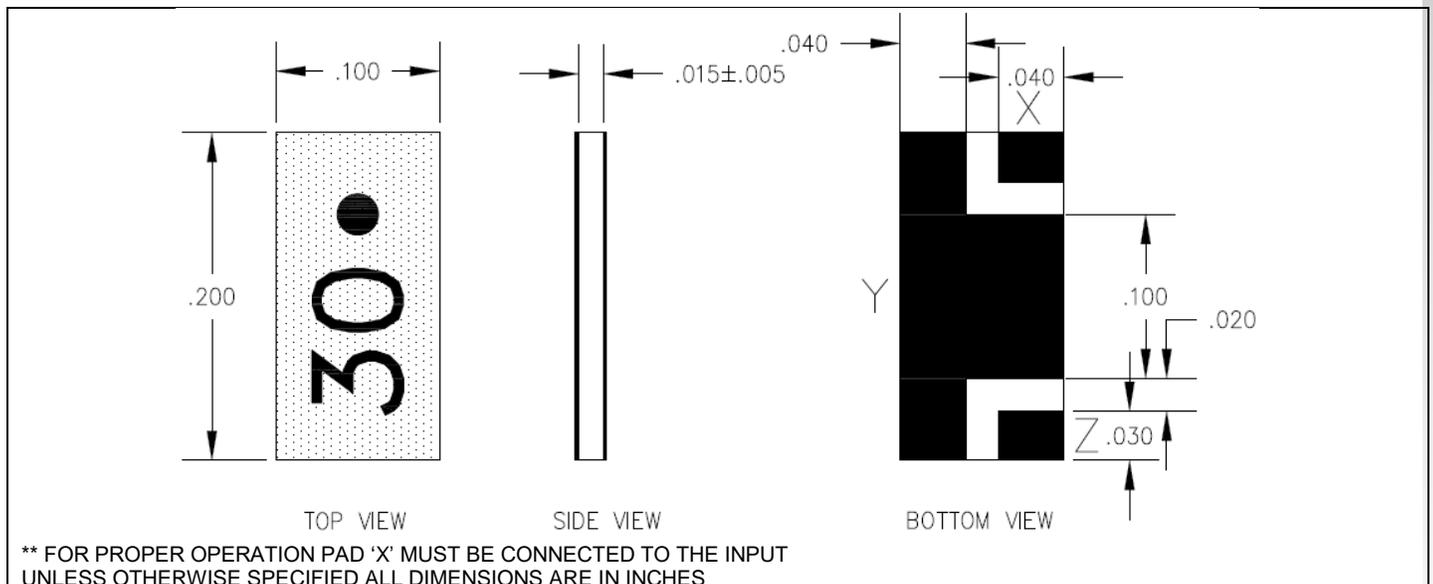
Tolerance is  $\pm 0.010$ ", unless otherwise specified. Designed to meet or exceed applicable portions of MIL-E-5400. **All dimensions in inches.**

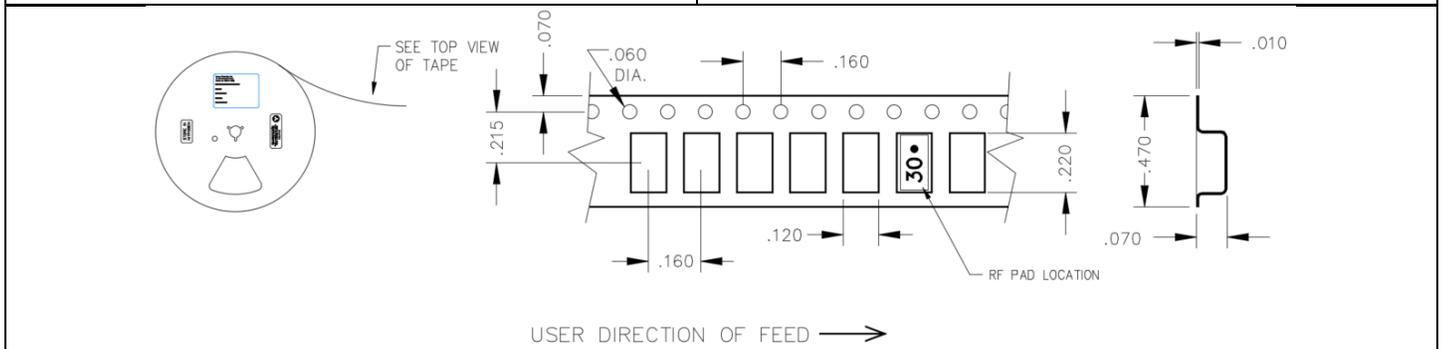
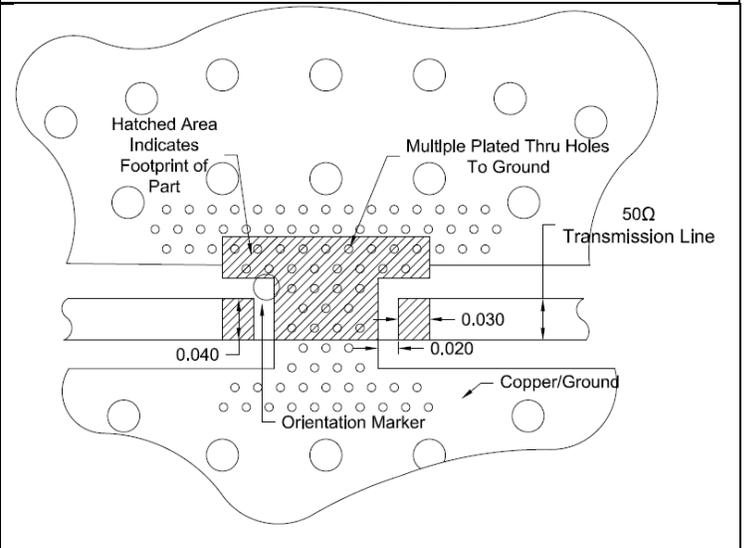
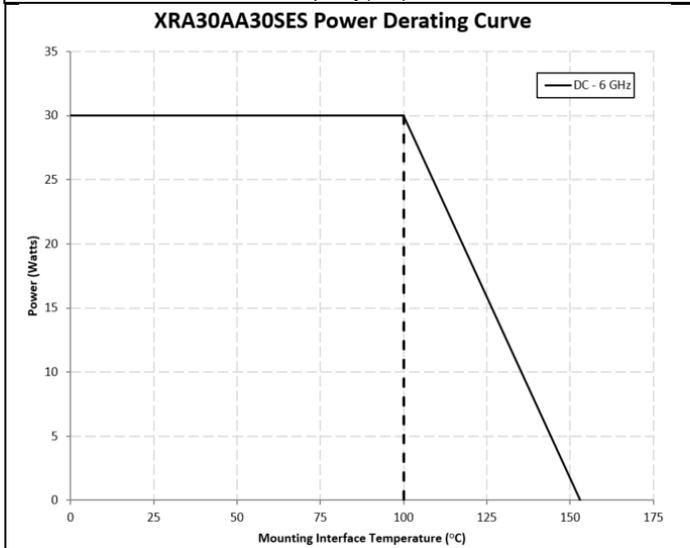
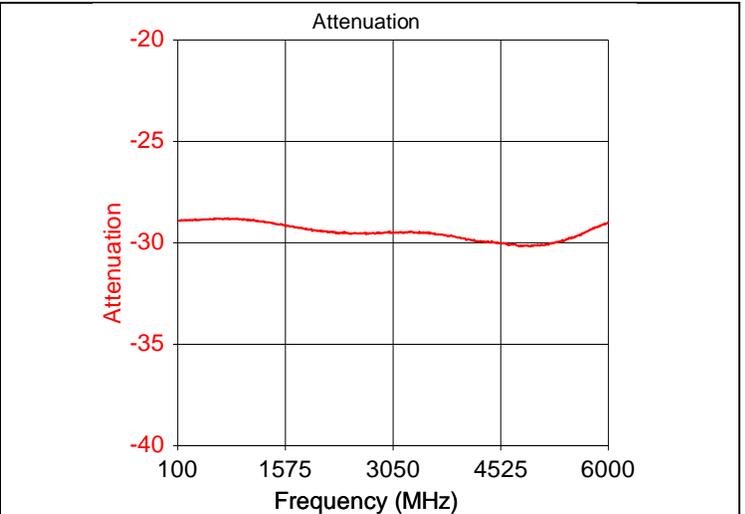
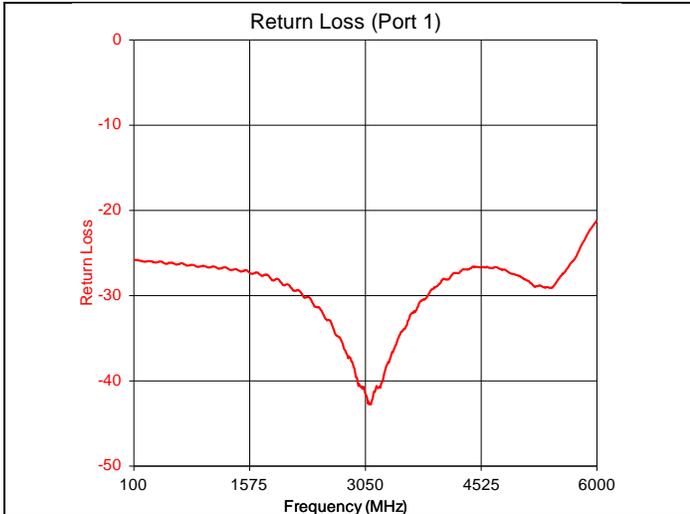
#### Electrical Specifications

<b>Attenuation Value:</b>	DC – 5.0 GHz	30 dB $\pm$ 1.5 dB
	5.0 – 6.0 GHz	30 dB $\pm$ 2.0 dB
<b>Power:</b>	30 Watts	
<b>Frequency Range:</b>	DC – 6.0GHz	
<b>Input Return Loss:</b>	20dB DC - 5.0GHz	
	18dB 5.0 – 6.0GHz	

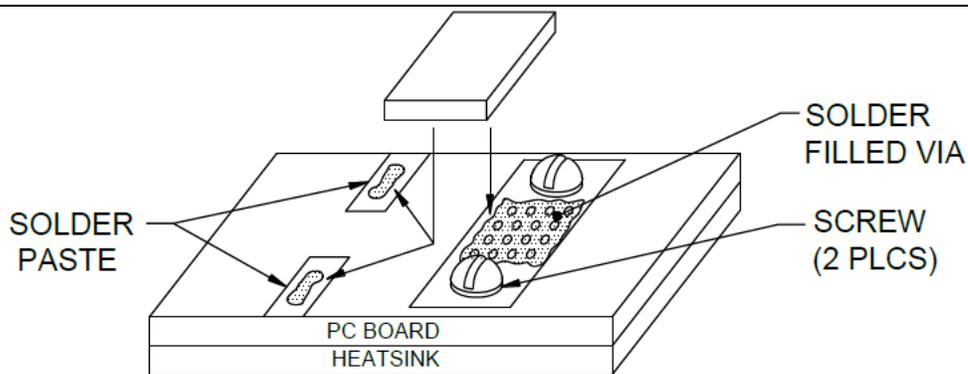
Specification based on unit properly installed using suggested mounting instructions and a 50 ohm nominal impedance. **Specifications subject to change.**

#### Outline Drawing





## Mounting Procedure:



### 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.