

## Surface Mount Attenuator 10 Watts, 2dB



The XRA10AA2SES 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
- 10 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) |

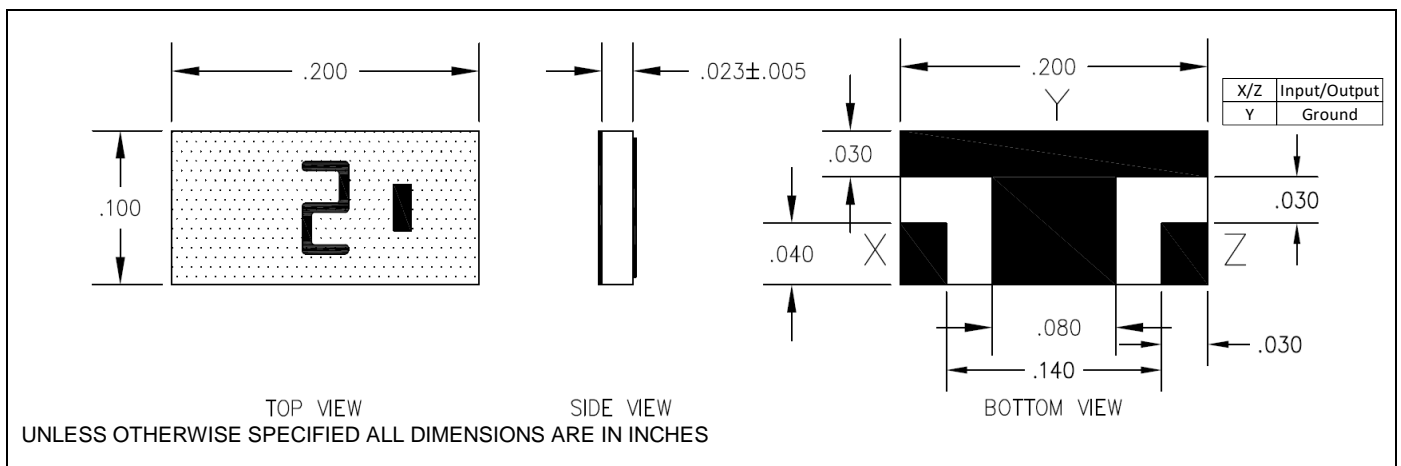
Tolerance is  $\pm 0.010"$ , unless otherwise specified. Designed to meet or exceed applicable portions of MIL-E-5400. **All dimensions in inches.**

### Electrical Specifications

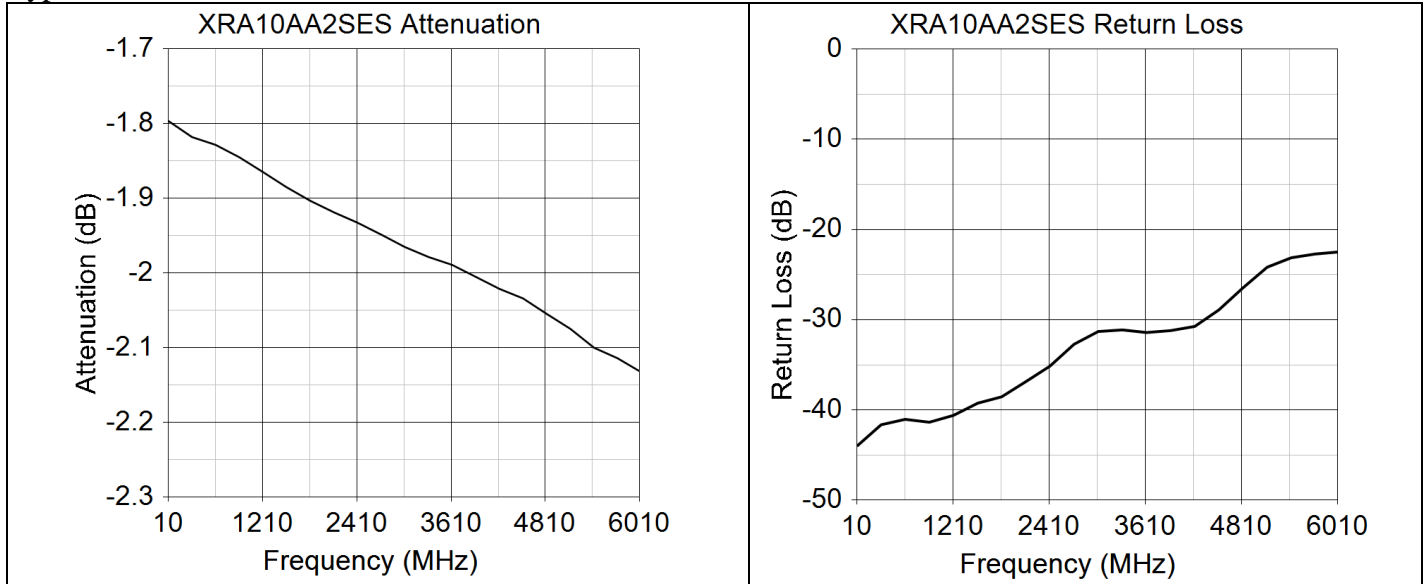
|                           |                  |
|---------------------------|------------------|
| <b>Attenuation Value:</b> | 2.0 $\pm$ 0.3 dB |
| <b>Power:</b>             | 10 Watts         |
| <b>Frequency Range:</b>   | DC – 6.0GHz      |
| <b>Input Return Loss:</b> | 20dB             |

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

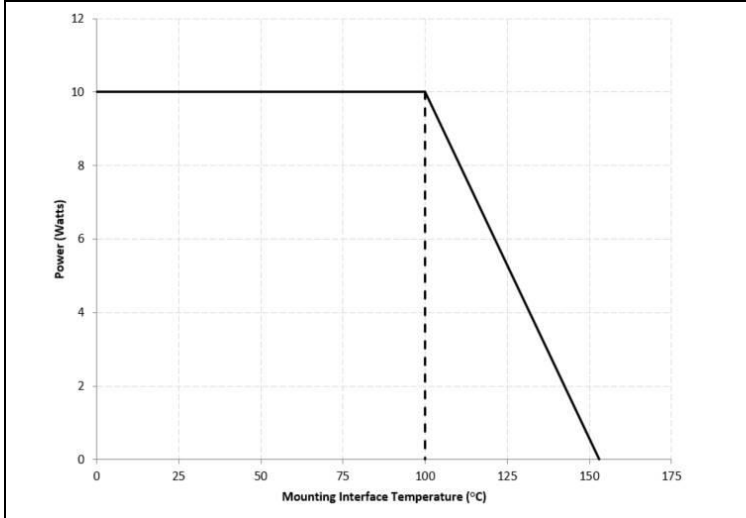
### Outline Drawing



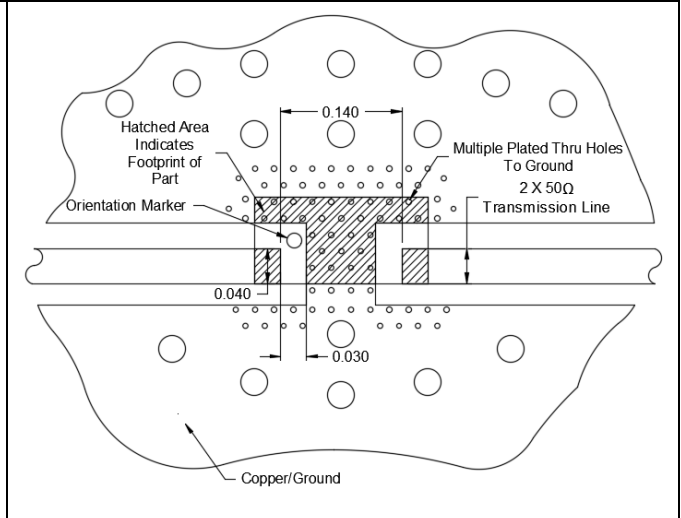
## Typical Performance



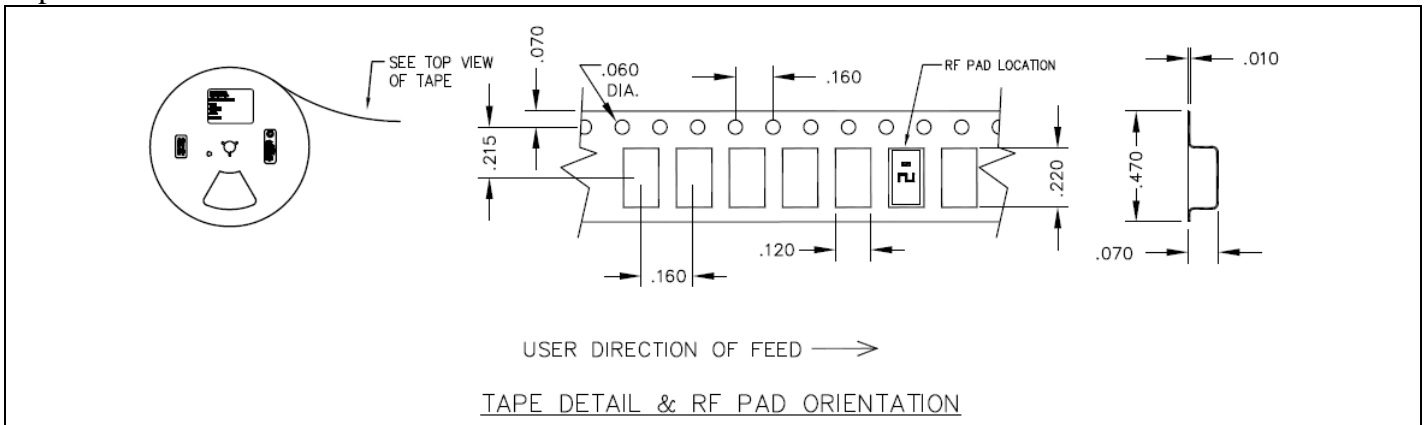
## Power De-rating:



## Mounting Footprint:



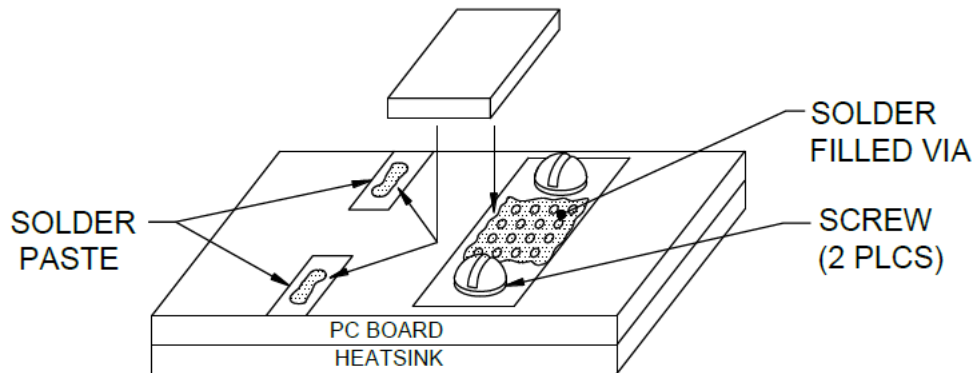
## Tape and reel information:



USA/Canada:  
Toll Free:  
Europe:

(315) 432-8909  
(800) 544-2414  
+44 2392-232392

## 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.