# Flangeless Mount Termination <br> 150 Watts, $50 \Omega$ 



## Description

The E150N50X4E is high performance Aluminum Nitride (AIN) termination intended as a cost competitive alternative to Beryllium Oxide (BeO). The termination 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 terminating circulators and for use in power combiners. The termination is also RoHS compliant!

## General Specifications

| Resistive Element | Thick film |
| :--- | :--- |
| Substrate | AlN Ceramic |
| Terminal Finish | Matte Tin over Nickel Barrier |
| Operating Temperature | -50 to $+200^{\circ} \mathrm{C}$ (see de rating chart) |

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

## Electrical Specifications

| Resistance Value: | 50 Ohms, $\pm 2 \%$ |
| :--- | :--- |
| Power: | 150 Watts |
| Frequency Range: | $\mathrm{DC}-3.0 \mathrm{GHz}$ |
| Return Loss | $25 \mathrm{~dB} \mathrm{DC}-2.0 \mathrm{GHz}$ |
|  | $20 \mathrm{~dB} \mathrm{DC}-3.0 \mathrm{GHz}$ |

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 and Procedure:

## SUGGESTED MOUNTING PROCEDURE

1. MAKE SURE THAT THE DEVICES ARE MOUNTED ON FLAT SURFACES (.001" UNDER THEDEVICE) TO OPTIMIZE THE HEAT TRANSFER.
2. POSITION DEVICE ON MOUNTING SURFACE AND SOLDER IN PLACE USING AN APPROPRIATE SOLDER.
3. SOLDER LEADS IN PLACE USING AN APPROPRIATE SOLDER TYPE WITH A CONTROLLED TEMPERATURE IRON.
