

Surface Mount Termination



Description

The RFP-1500-XX-50 family of surface mount terminations consists of five parts matched to the complex impedance of each of the five high power Xinger circulators. With each termination matched to the circulator's complex impedance, the pair will provide superior performance and a true pick and place solution. The SMD terminations are available for AMPS, GSM, DCS, PCS and UMTS frequency bands, and they can be used in many applications, not only as the load on the Xinger circulator. Other typical applications include the termination for the isolated port of 3dB couplers.

Features:

- **100 Watts**
- **Lowest Cost**
- **True Surface Mount**
- **Xinger[®] Circulator Matched**
- **Alumina Ceramic**
- **Non-Nichrome Resistive Element**
- **Low VSWR**
- **100% Tested**

General Specifications

Resistive Element	Thick film
Substrate	Alumina
Terminal Finish	Thick film Silver
Operating Temperature	-55 to +125°C (see chart)

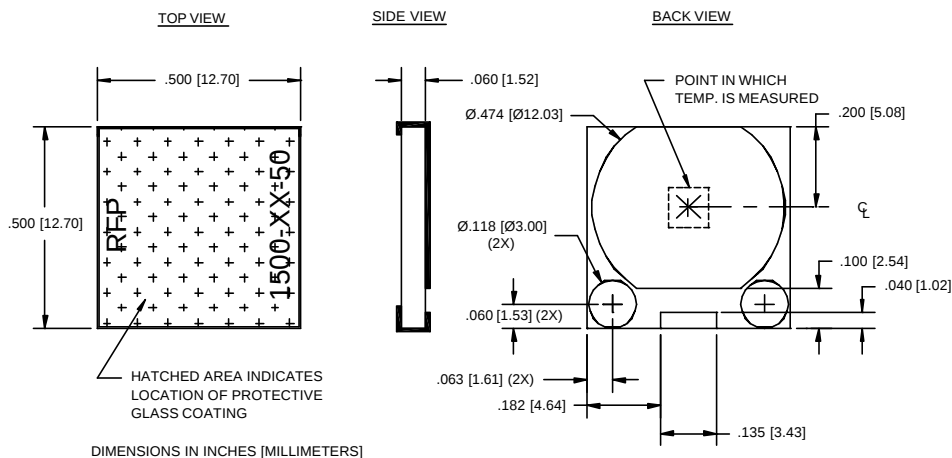
Tolerance is ± 0.010 ", unless otherwise specified. Designed to meet or exceed applicable portions of MIL-E-5400. All dimensions in inches.

Electrical Specifications

Resistance Value:	50 ohms, $\pm 2\%$
Power:	100 Watts (with PCB solder down to heatsink)
Frequency Range:	896-894, 925-960, 1805-1880, 1930-1990, 2110-2170 MHz
V.S.W.R.:	<1.15:1

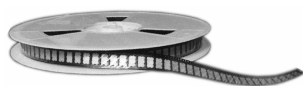
Specification based on unit properly installed using suggested mounting instructions and a 50 ohm nominal impedance. **Specifications subject to change without notice**

Outline Drawing



XX DENOTES CIRCULATOR TYPE

Rev. 10/24/03

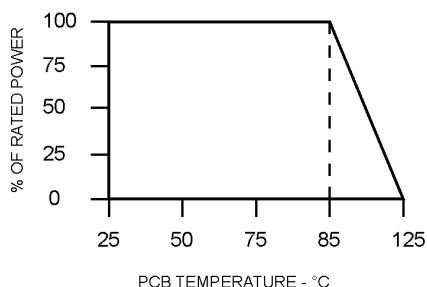


Typical Performance:

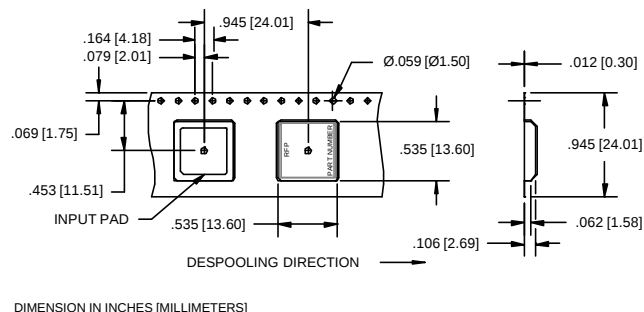
Part Number	Resistance (ohms)	Tol. (+/-)	VSWR	Frequency (MHz.)	Matched Circulator
RFP-1500-8-50	50	2.0	1.15:1	869-894	X800x-100
RFP-1500-9-50	50	2.0	1.15:1	925-960	X900x-100
RFP-1500-18-50	50	2.0	1.15:1	1805-1880	X180x-100
RFP-1500-19-50	50	2.0	1.15:1	1930-1990	X190x-100
RFP-1500-21-50	50	2.0	1.15:1	2110-2170	X210x-100

Note: X800x-100, where x refers to the circulator direction of rotation: **L** for clockwise or **R** for counter clockwise rotation, i.e. X800**R**-100.

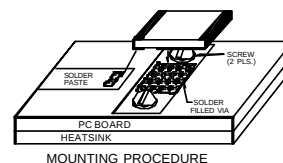
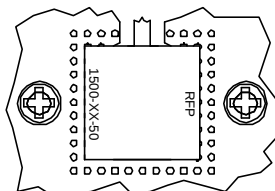
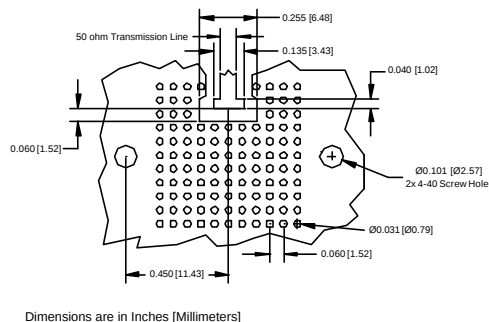
Power De-rating:



Tape & Reel:



Mounting Footprint and Procedure:



1. Drill thermal vias through PCB and fill with solder, such as SN63 type.
2. Solder part in place using SN63 type solder with controlled temperature iron (700°F).
3. To ensure good thermal connectivity to heat sink, which is critical for proper operation drill and tap heatsink and mount PCB board to heat sink using screws.

