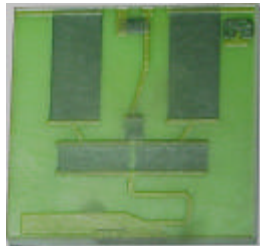




Surface Mount Attenuator 100 Watts



Description

The RFP-1557-XX-XX family of surface mount attenuators consists of three parts matched to the complex impedance of each of the five high power Xinger circulators. With each attenuator matched to the circulator's complex impedance, the pair will provide superior performance and a true pick and place solution. The SMD attenuators 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 coupled port of the directional couplers.

General Specifications

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

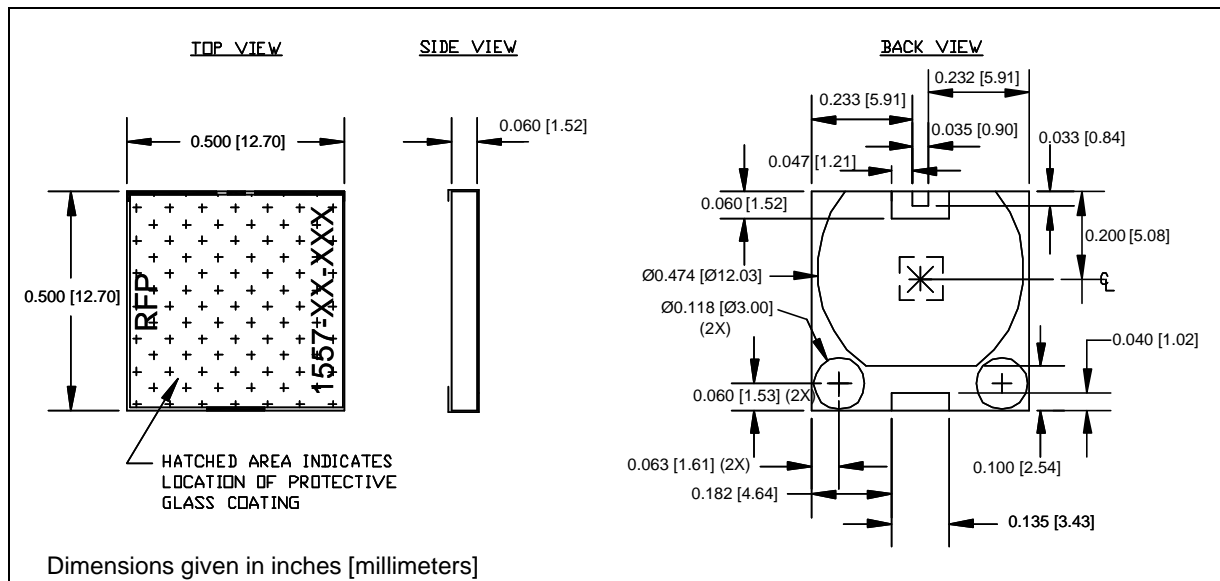
Attenuation Value:	20, 30 dB \pm 2dB
Power:	100 Watts
Frequency Range:	869-960, 1805-1990, 2110-2170 MHz
V.S.W.R.:	<1.20:1

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

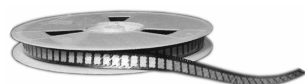
Features:

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

Outline Drawing



Rev. 10/31/03



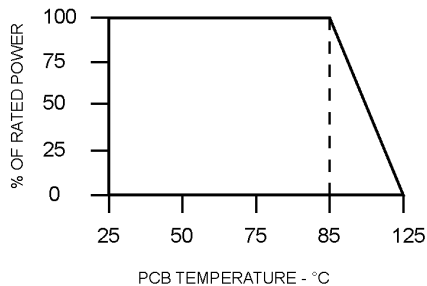


Specifications:

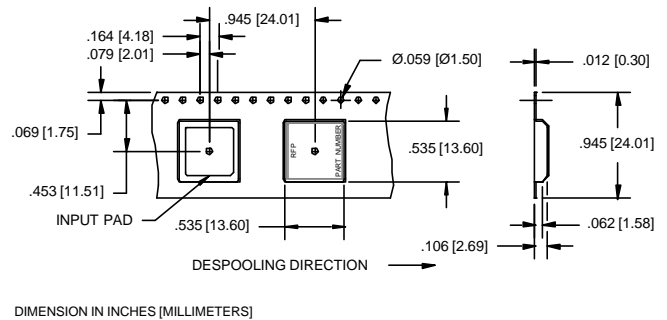
PART NUMBER	FREQUENCY (MHz)	ATTENUATION (dB)	TOL. (+/-dB)	VSWR	MATCHED CIRCULATOR
RFP-1557-9-20	869-960	20	1.0	1.20:1	X800x-100 X900x-100
RFP-1557-19-20	1805-1990	20	1.0	1.20:1	X180x-100 X190x-100
RFP-1557-21-20	2110-2170	20	1.0	1.20:1	X210x-100
RFP-1557-9-30	869-960	30	1.5	1.20:1	X800x-100 X900x-100
RFP-1557-19-30	1805-1990	30	1.5	1.20:1	X180x-100 X190x-100
RFP-1557-21-30	2110-2170	30	1.5	1.20:1	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:

Dimensions in inches [millimeters]:

- 50 ohm line: 0.036 [0.92]
- 50 ohm line: 0.018 [0.46]
- 50 ohm line: 0.018 [0.46]
- 50 ohm line: 0.061 [1.54]
- 50 ohm line: 0.024 [0.62]
- 50 ohm line: 0.273 [6.93]
- 0.155 [3.93]
- 0.082 [2.08]
- 0.024 [0.62]
- Ø0.019 [Ø0.48]
- Ø0.061 [Ø1.56]
- 2x 4-40 Screw Hole

Dimension given in inches [millimeters]
For best thermal performance the PCB should be soldered to the heat sink.

MOUNTING 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°C).
3. To ensure good thermal connectivity to heat sink, which is critical for proper operation, drill and tap heatsink and mount PCB board to heatsink using screws.

