

Features

- Frequency Range 45-2000 MHz
- Return Loss: 22 dB typ.
- Insertion Loss: 0.7 dB typ.
- Miniature Package: .118" x .150" SMT
- 1:1 Transformer, 75 Ohm Impedance

Applications

- CATV Networks
- Broadband Systems

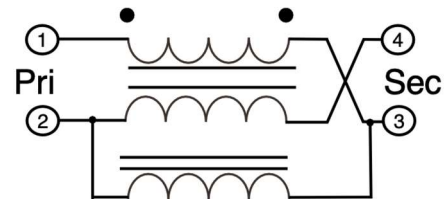
Specifications

Parameter	Specification			Units
	Min	Typ.	Max.	
Operating Frequency Range	45		2000	MHz
Insertion Loss		0.7	1.2	dB
Amplitude Balance:				
45 – 1200 MHz		0.3	0.7	dB
1200 – 2000 MHz		0.8	1.0	
Phase Balance		4	6	Degrees
Input Return Loss:	18	22		dB
Nominal Impedance	75 Ω			
Impedance Ratio	1:1			
Transformer Type	Unbalanced to Balanced			

Product Description

The MRFXF0090 was developed for CATV Networks and broadband applications that require repeatable and reliable performance to 2 GHz. The balun offers excellent return loss and low insertion loss for balance to single-ended RF applications. The MRFXF0090 is low-cost, surface mount, lead-free, and RoHS compliant. The balun uses welded-wire construction for increased reliability. S-parameters are available on the web.

Schematic Diagram



Exceeding any one or a combination of the Absolute Maximum Rating conditions may cause permanent damage to the device. Extended applications of Absolute Maximum Rating conditions to the device may reduce device reliability. Specified typical performance or functional operation of the device under Absolute Maximum Rating conditions not applied.

RoHS Status based on EU Directive 2002/95/EC (at the time of this document revision)

The information in this publication is believed to be accurate and reliable. However, no responsibilities is assumed by MiniRF Inc. for its use, nor for any infringements of patents, or other rights of third parties, resulting from its use. No license is granted by implication or otherwise under any patent or patent rights of MiniRF Inc.

Absolute Maximum Ratings

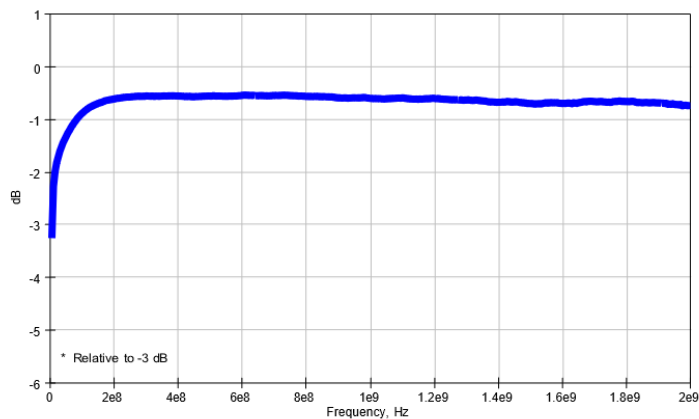
Power Handling	2W
Operating Temp	-40°C to 100°C
Storage Temp	-40°C to 100°C



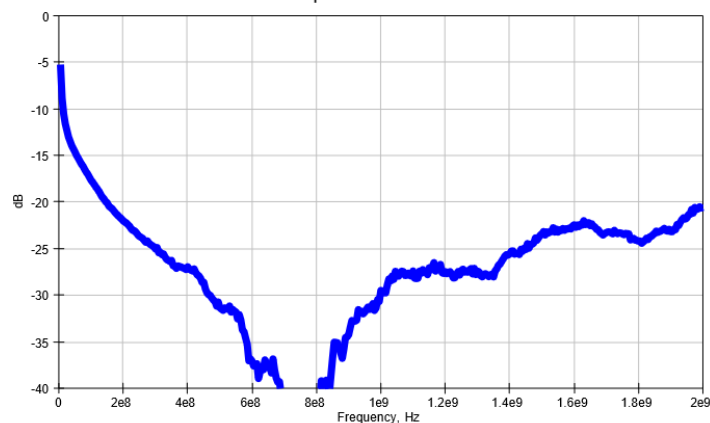
RoHS Compliant and Pb-Free Product
Package: S22

Typical Data

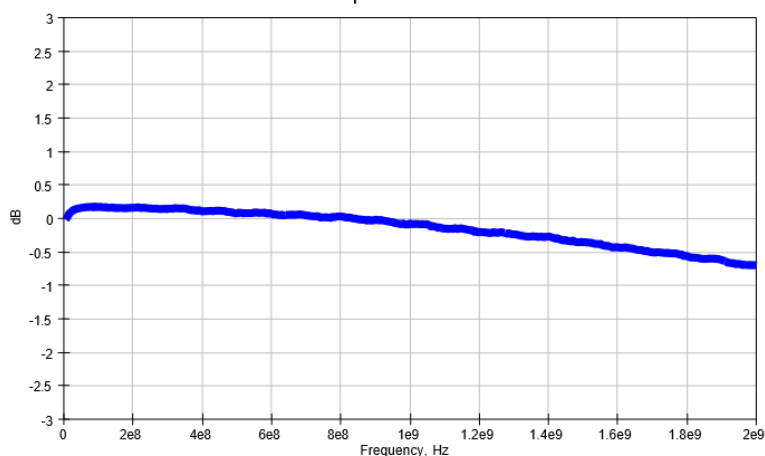
Insertion Loss



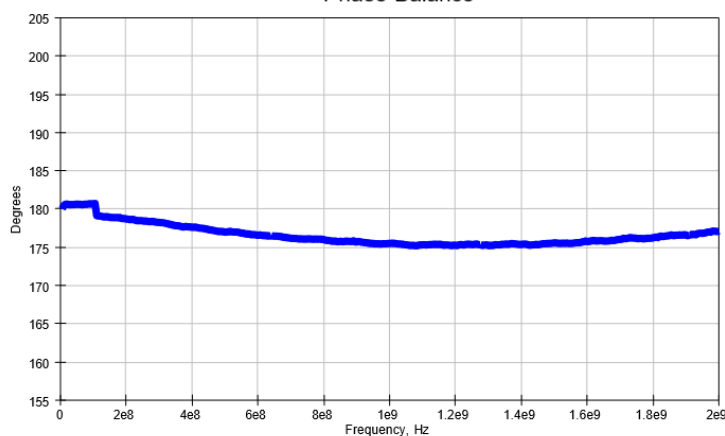
Input Return Loss



Amplitude Balance



Phase Balance





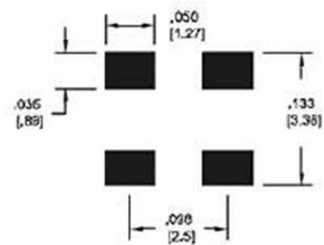
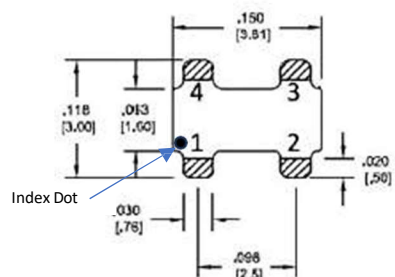
RoHS Compliant and Pb-Free Product
Package: S22

Connections

PIN	FUNCTION
1	Primary Dot (Input)
2	Primary (Ground)
3	Secondary Dot (Output 1)
4	Secondary (Output 2)

S22 Package Drawing

Dimensions in inches (mm)



PCB FOOTPRINT

