



RoHS Compliant and Pb-Free Product  
Package: S20

## Features

- Frequency Range: 5-1000 MHz
- Return Loss: 23 dB typ.
- Insertion Loss: 0.4 dB typ.
- Miniature Package: .118" x .150" SMT
- 1:1 Transformer, 75 Ohm Impedance

## Applications

- Broadband Systems
- CATV Networks

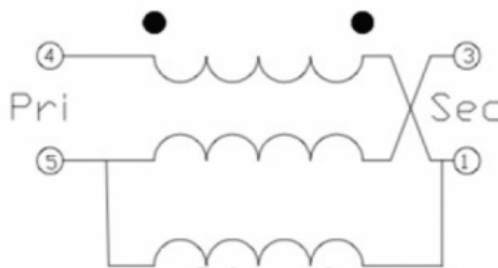
## Product Description

The MRFXF0108 was designed for CATV networks and broadband applications that require repeatable and reliable performance to 1 GHz. This balun was designed to withstand higher surge voltages without damage to active elements in the circuit! It also offers excellent return loss and low insertion loss for all return-path applications or forward to 1 GHz. The MRFXF0108 is low-cost, surface mount, lead-free, and RoHS compliant. S parameters are available on the web.

## Specifications

	Min	Typ.	Max.	
Operating Frequency Range	5		1000	MHz
Insertion Loss		0.4	1.0	dB
Amplitude Balance:		1.2	0.5	dB
Phase Balance		2	5	°
Input Return Loss	18	23		
Nominal Impedance	75 Ohms			
Impedance Ratio	1:1			
Transformer Type	Unbalanced to Balanced			

## 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)

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## Absolute Maximum Ratings

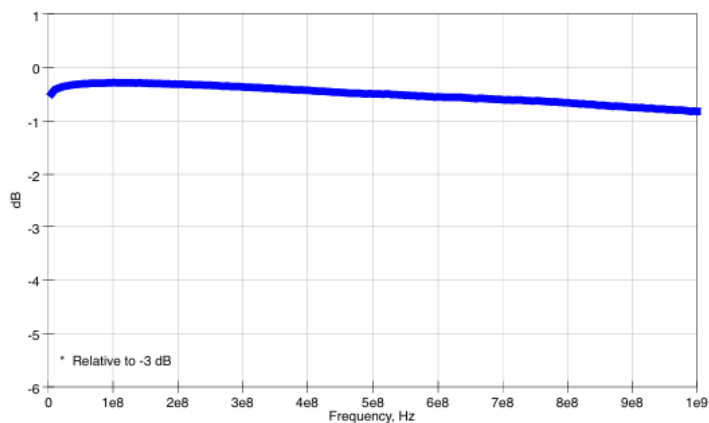
Power Handling	2W
Operating Temp	-40°C to +100°C
Storage Temp	-40°C to +100°C



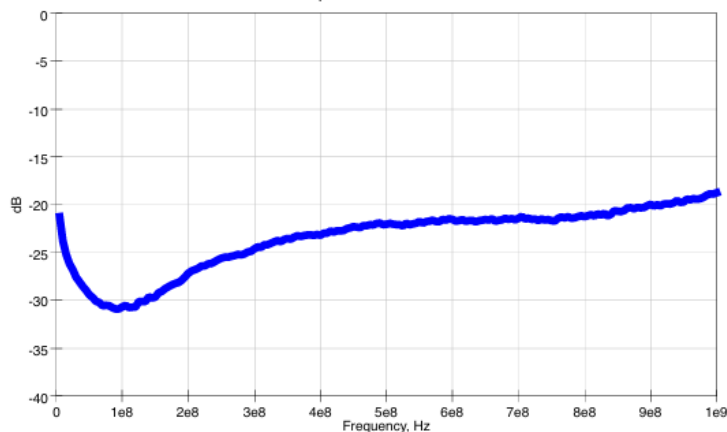
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## Typical Data

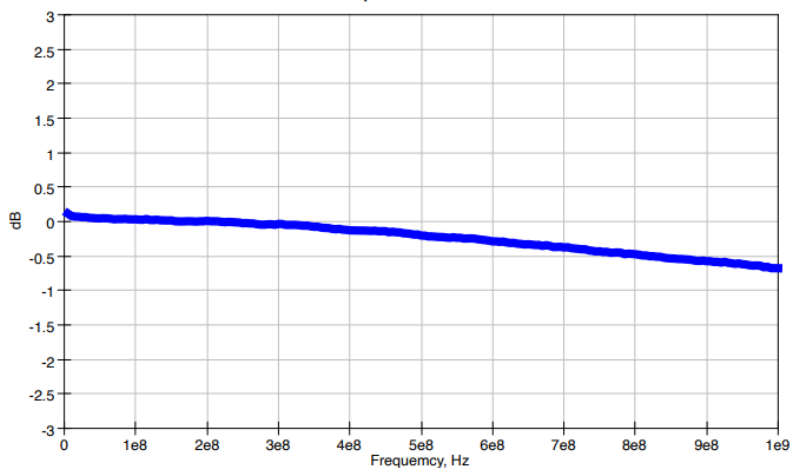
Insertion Loss



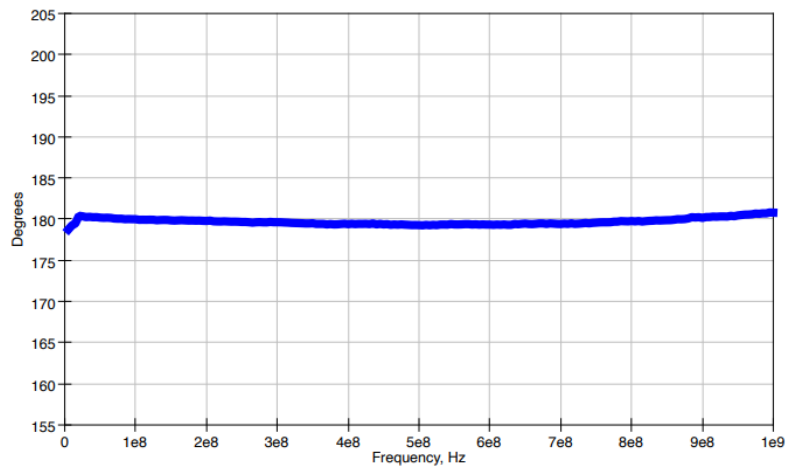
Input Return Loss



Amplitude Balance



Phase Balance





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## Connections

### Pin-out

PIN	FUNCTION
1	SECONDARY DOT (OUTPUT 1)
2	NC
3	SECONDARY (OUTPUT 2)
4	PRIMARY DOT (Input)
5	PRIMARY (Ground)

## S20 Package Drawing

Dimensions in inches (mm)

