



RoHS Compliant and Pb-Free Product  
Package: S20

## Features

- Frequency Range: 45 - 1800 MHz
- Insertion Loss: 0.7 dB typ.
- Input Return Loss: 22 dB typ.
- Miniature .150 x .150 in SMT Package
- Transmission Line Type: 75 Ohm

## Applications

- Broadband / CATV
- Wireless Applications

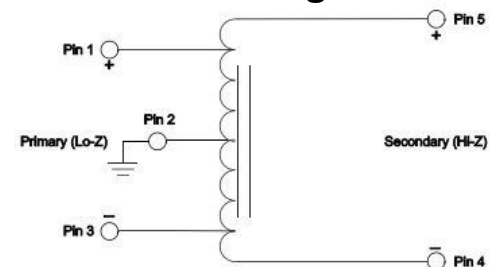
## Specifications

Parameter	Specification			Units
	Min	Typ.	Max.	
Operating Frequency Range	45		1800	MHz
Insertion Loss		0.7	1.1	dB
Amplitude Balance:		0.3	0.5	dB
Phase Balance:		2	5	Degrees
Input Return Loss:	18	22		dB
Nominal Impedance	75 $\Omega$			
Impedance Ratio	1:2			
Transformer Type	Balanced to Balanced			

## Product Description

The MRFXF0103 is designed for next gen CATV networks and broadband applications that require repeatable and reliable performance to 1.8 GHz. The balun offers excellent return loss and low insertion loss, while also keeping a very flat impedance transformation response 1:2 Ohm balanced. The MRFXF0103 is low-cost, surface mount, lead-free, and RoHS compliant. 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)

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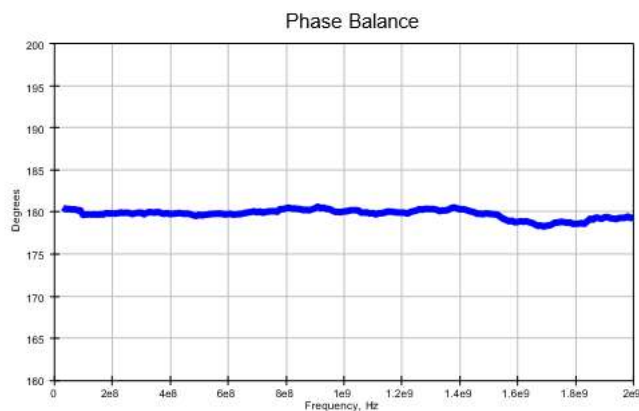
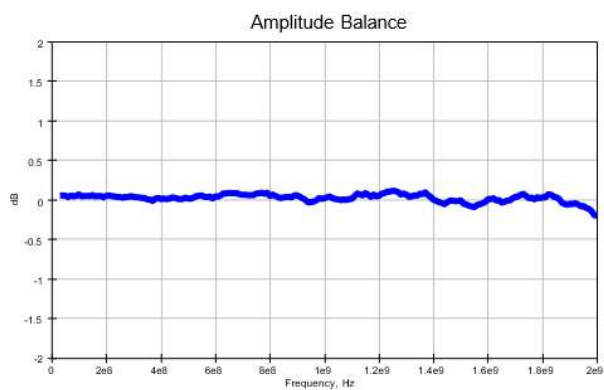
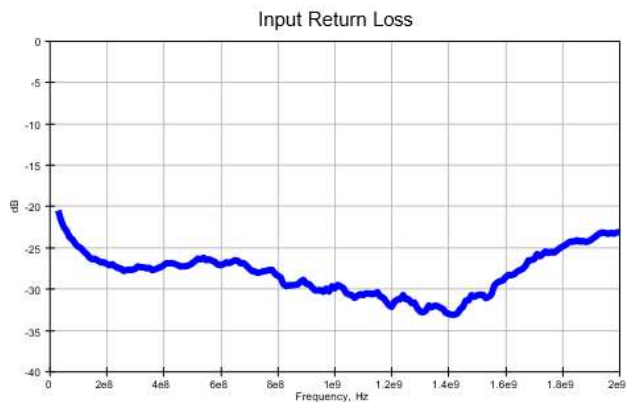
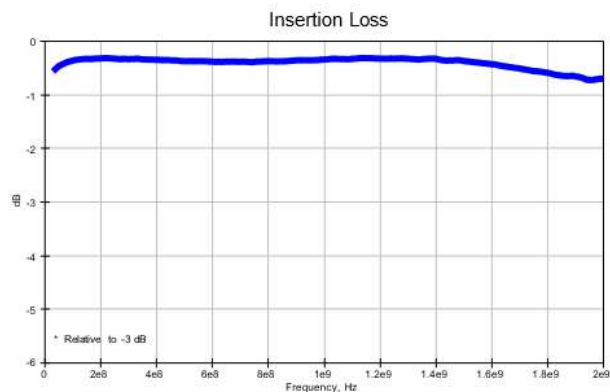
## Absolute Maximum Ratings

Power Handling	2 Watts
Operating Temp	-45°C to +85°C
Storage Temp	-55°C to +100°C



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## Typical Data





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### Connections

PIN	FUNCTION
1	Primary Dot (Lo-Z +)
2	Ground
3	Primary (Lo-Z -)
4	Secondary (Hi-Z -)
5	Secondary Dot (Hi-Z +)

### S20 Package Drawing

Dimensions in inches (mm)

