

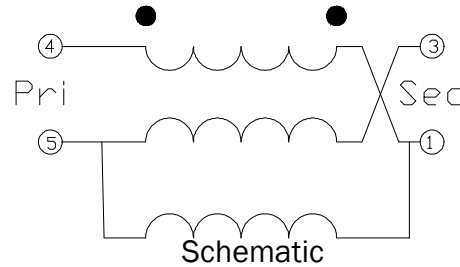


RoHS Compliant and Pb-Free Product  
Package: S-20W



### Features

- Frequency Range 45 - 1218 MHz
- Low Cost and **RoHS** Compliant
- Transmission Line Type
- Industry Standard SMT package
- Available in Tape-and -Reel
- 75 Ohms Characteristic Impedance



### Applications

- Broadband
- Wireless Communications

### Product Description

The MRFXF0035 Transformer is designed for applications that require very small, low cost, and highly reliable surface mount components. Applications may be found in broadband, wireless and other communications systems. These units are built Lead-Free and RoHS compliant and feature welded wire construction for increased reliability. S-Parameters are available on request.

### Specifications

Parameter	Min.	Typ.	Max.	Unit	Condition
Typical values represent Mid-Band performance at 25 °C					
Frequency Range	45		1218	MHz	
Insertion Loss, 45 - 100 MHz		0.45	0.55	dB	
Insertion Loss, 100 - 600 MHz		0.5	0.6	dB	
Insertion Loss, 600 - 1200 MHz		0.6	0.75	dB	
S21, S31 Amplitude Flatness		0.2	0.3	dB	
Amplitude Balance		0.2	0.6	dB	
Phase Balance		3	5	°	Nominal Phase Difference is 180°
Input Return Loss	18	25		dB	17 dB Minimum over Temperature Range
Impedance Ratio	1:1				
Type - Transmission Line	Unbalanced to Balanced				

### Absolute Maximum Ratings

Parameter	Rating	Unit
RF Power	2	Watt
Operating Temperature	-40 to +100	°C
Storage Temperature	-55 to +125	°C



**Caution!** ESD sensitive device.

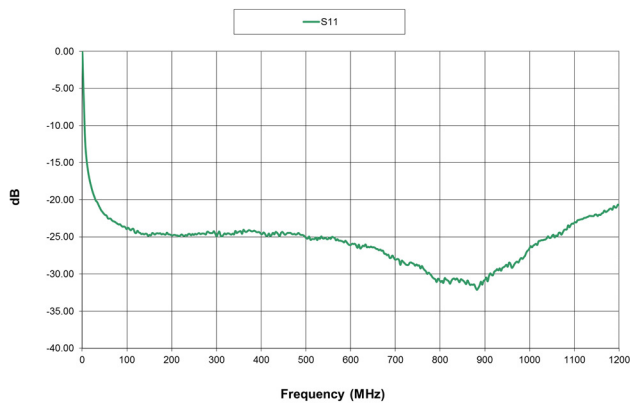
Exceeding any one or a combination of the Absolute Maximum Rating conditions may cause permanent damage to the device. Extended application of Absolute Maximum Rating conditions to the device may reduce device reliability. Specified typical performance or functional operation of the device under Absolute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

RoHS status based on EUDirective2002/95/EC (at time of this document revision).

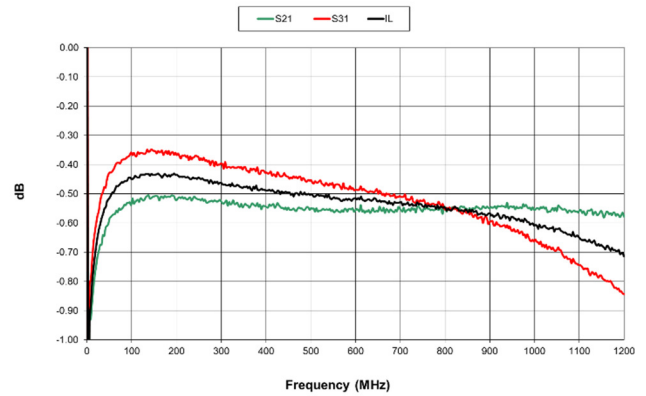
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### Typical Data

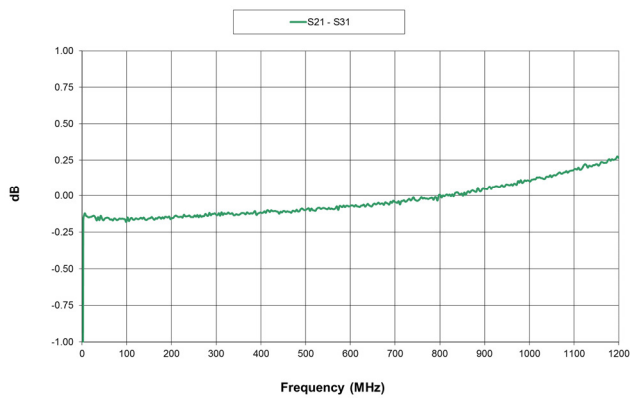
Input Return Loss



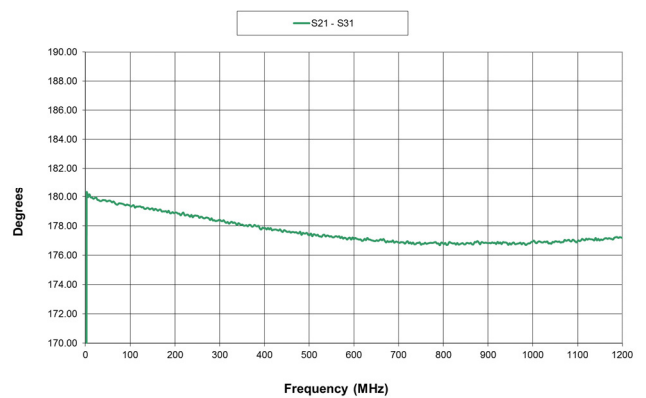
Insertion Loss



Amplitude Balance



Phase Balance



### Pin Out

Pin	Function
1	Secondary Dot (Output 2)
2	NC
3	Secondary (Output 1)
4	Primary Dot (Input)
5	Ground

### S20W Package Drawing

Dimensions in inches (millimeters)

