

# MRFXF0024

1:1 SMT TRANSFORMER

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



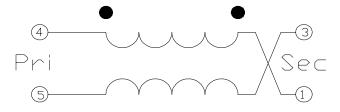


#### **Features**

- 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



Schematic

### **Product Description**

The MRFXF0024 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.	Тур.	Max.	Unit	Condition
					Typical values represent Mid-Band performance at 25 °C
Frequency Range	45		1218	MHz	
Insertion Loss, 45 - 100 MHz		0.4	0.5	dB	
Insertion Loss, 100 - 600 MHz		0.5	0.6	dB	
Insertion Loss, 600 - 1200 MHz		0.6	0.7	dB	
Amplitude Balance		0.5	1.50	dB	
Phase Balance		4	10	۰	Nominal Phase Difference is 180°
Input Return Loss	20	25		dB	
Impedance Ratio	1:1				
Type - Transmission Line	Unbalanced to Balanced				

### **Absolute Maximum Ratings**

Parameter	Rating	Unit
RF Power	2	Watt
Operating Temperature	-40 to +85	°C
Storage Temperature	-55 to +100	°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 EUDirective 2002/95/EC (at time of this document revision).

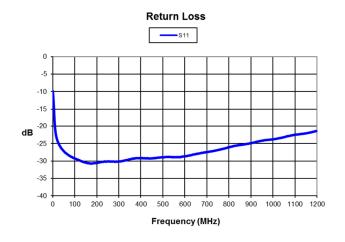
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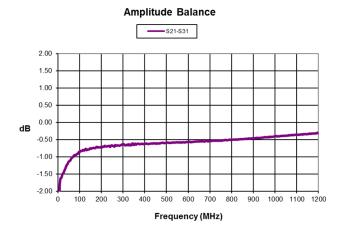
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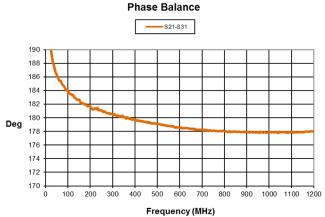
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## **Typical Data**











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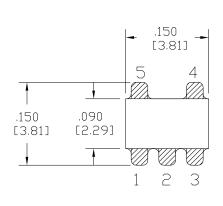
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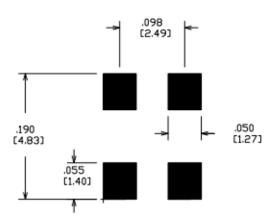
#### **Pin Out**

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

# **S20 Package Drawing**

Dimensions in inches (millimeters)





PCB FOOTPRINT

