

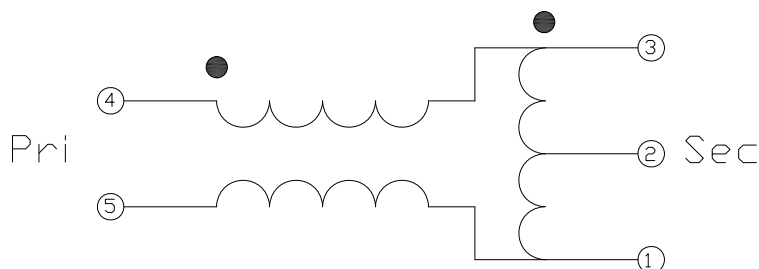


Features

- Frequency Range 5MHz to 1000MHz
- Low Cost and RoHS Compliant
- Industry Standard SMT package
- Available in Tape-and-Reel
- 50Ω Characteristic Impedance
- Transmission Line

Applications

- Broadband/CATV
- Wireless



Schematic

Product Description

The RFXF4513 Transformer is designed for applications that require 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. S-Parameters are available on request.

Optimum Technology Matching® Applied

- | | | | |
|--------------------------------------|--------------------------------------|-------------------------------------|------------------------------------|
| <input type="checkbox"/> GaAs HBT | <input type="checkbox"/> SiGe BiCMOS | <input type="checkbox"/> GaAs pHEMT | <input type="checkbox"/> GaN HEMT |
| <input type="checkbox"/> GaAs MESFET | <input type="checkbox"/> Si BiCMOS | <input type="checkbox"/> Si CMOS | <input type="checkbox"/> BiFET HBT |
| <input type="checkbox"/> InGaP HBT | <input type="checkbox"/> SiGe HBT | <input type="checkbox"/> Si BJT | <input type="checkbox"/> LDMOS |

Absolute Maximum Ratings

Parameter	Rating	Unit
RF Power	2	W
Operating Temperature	-45 to +85	°C
Storage Temperature	-55 to +100	°C



Caution! ESD sensitive device.

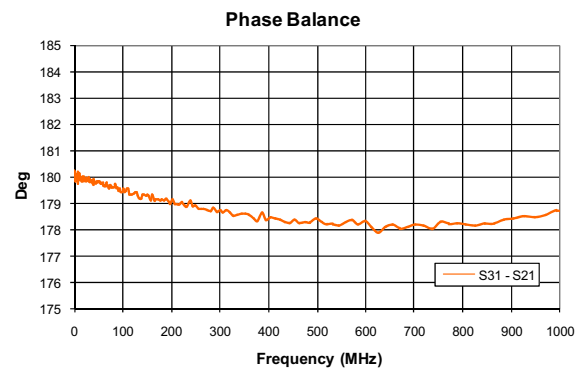
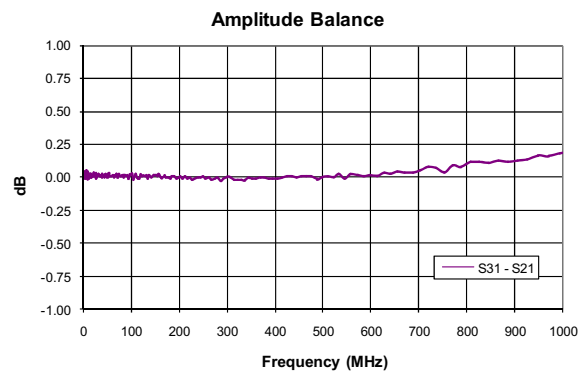
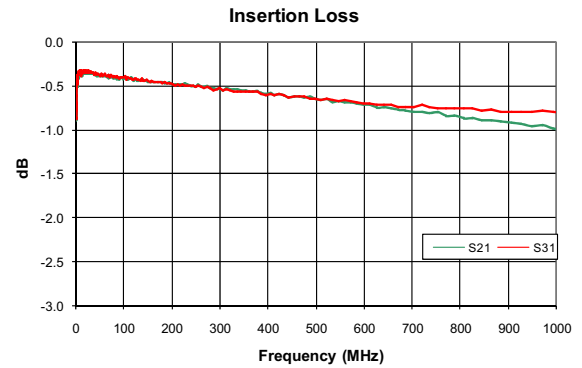
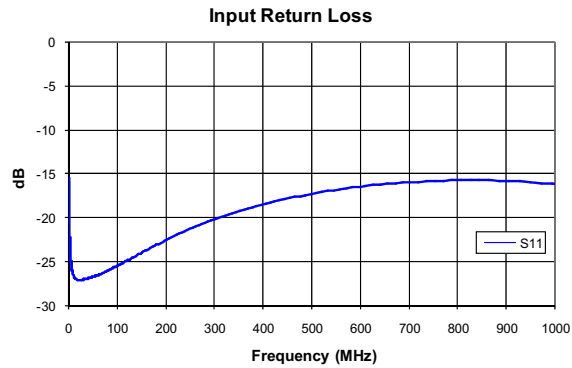
Exceeding any one or a combination of the Absolute Maximum Rating conditions may cause permanent damage to the device. Extended application of Absolute Maximum Rating conditions to the device may reduce device reliability. Specified typical performance or functional operation of the device under Absolute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

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RoHS (Restriction of Hazardous Substances): Compliant per EU Directive 2002/95/EC.

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Overall					Typical values represent Mid-Band performance at 25 °C
Frequency Range	5		1000	MHz	
Insertion Loss< 1dB	5		850	MHz	
Insertion Loss< 1.5dB	5		1000	MHz	
Amplitude Balance		0.3	0.5	dB	
Phase Balance		3	5	°	Nominal Phase Difference is 180°
Input Return Loss	12	14		dB	
Impedance Ratio, P:S	1:1				
Type - Transmission Line	Unbalance to Balanced				

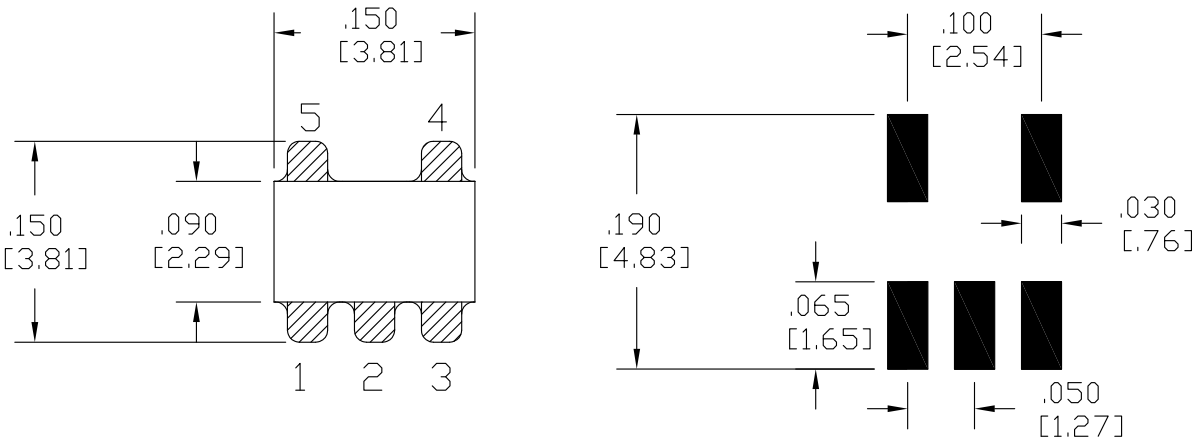


Pin Names and Description

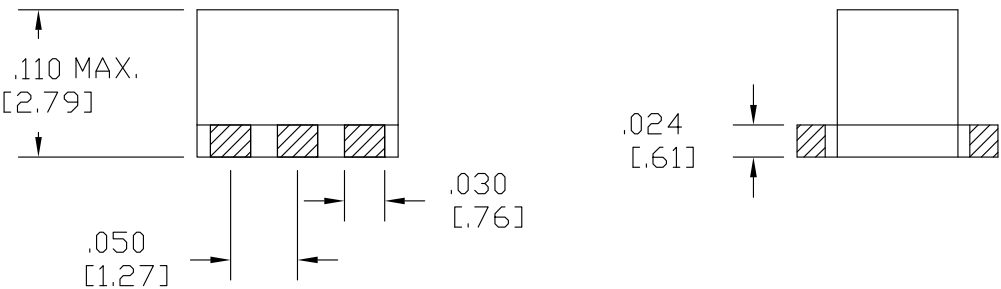
Pin	Function	Description
1	Secondary	Output 2
2	Secondary CT	Ground
3	Secondary Dot	Output 1
4	Primary Dot	Input
5	Primary	Ground

Package Drawing - S20

Dimensions in inches (millimeters)



PCB FOOTPRINT



Ordering Information

Ordering Code	Description	Reel Size	Package
RFXF4513SB	5 MHz to 1000MHz 1:1 SMT Transformer	N/A	5-Piece bag
RFXF4513SQ	5 MHz to 1000MHz 1:1 SMT Transformer	N/A	25-Piece bag
RFXF4513SR	5 MHz to 1000MHz 1:1 SMT Transformer	13"	100-Piece reel
RFXF4513TR13	5 MHz to 1000MHz 1:1 SMT Transformer	13"	1000-Piece reel