

Features

- Frequency Range 5 to 850 MHz
- Low Avg. Insertion loss <1 dB
- Phase & Amp Balance +/- 0.3dB & 3 degrees
- High Current DC Bias 400 mA
- Input/Output Impedance 75 Ohms
- Include DC handling current handling capability of bias tap
- Low distortion /temp variation



Applications

- Broadband/CATV
- Wireless Communications

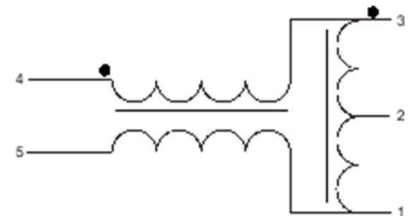
Product Description

The MRFXF5R18 is a low cost broadband transformer ideal for maximizing power transfer from balanced to unbalanced circuits or from the output amplifier to antennas. Its low insertion loss <1 dB at 850 MHz and high current handling capability makes this attractive for designers to use this product on a number of RF communication platform both narrow and broadband applications.

Specification

Parameter	Specification			Units
	Min	Typ.	Max.	
Operating Frequency Range	5		850	MHz
Insertion Loss:				
5 MHz – 10 MHz		0.4	0.6	dB
10 MHz – 300 MHz		0.3	0.5	
10 MHz – 850 MHz		0.5	0.7	
Amplitude Balance:				
5 MHz – 300 MHz		± 0.1	± 0.2	dB
5 MHz – 850 MHz		$< \pm 0.2$	± 0.4	
Phase Balance				
5 MHz – 350 MHz		± 1	± 2	Degrees
5 MHz – 850 MHz		$< \pm 1.5$	± 3	
Input Return Loss:				
5 MHz – 10 MHz	18	20		dB
10 MHz – 300 MHz	20	25		
10 MHz – 850 MHz	19	21		
Nominal Impedance	75 Ohm			
Impedance Ratio	1:1			
Transformer Type	Unbalanced to Balanced			
Package	S20			

Schematic Diagram



Absolute Maximum Ratings

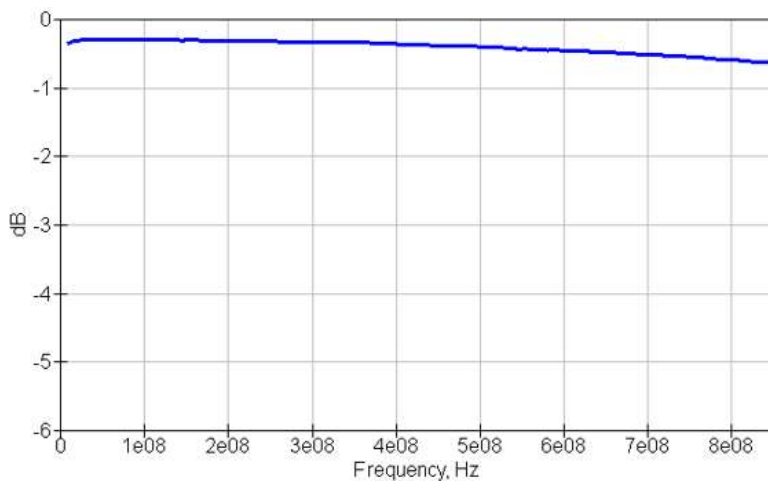
Power Handling	3	Watt
Operating Temp	-40 to +85	°C
Storage Temp	-40 to +100	°C



MRFXF5R18 BALUN

Typical Data

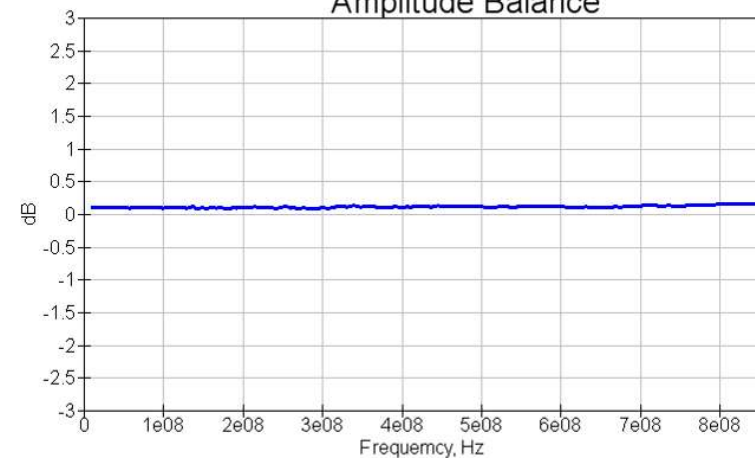
Insertion Loss



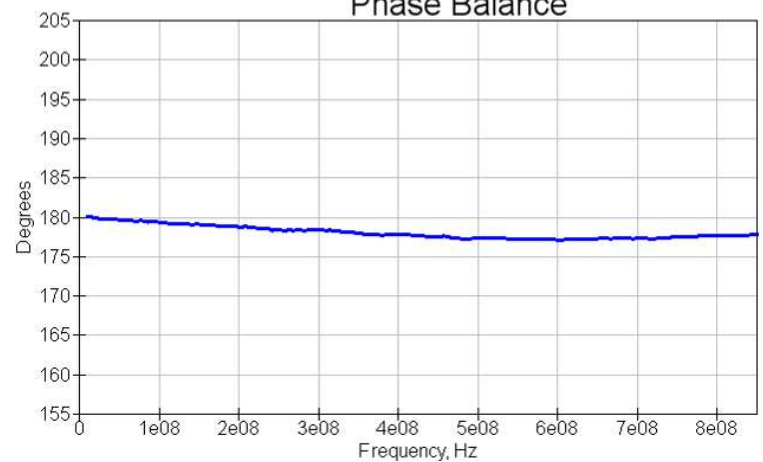
Input Return Loss



Amplitude Balance



Phase Balance



MiniRF Incorporated

46560 Fremont Blvd. Unit 114 - Fremont CA, 94538

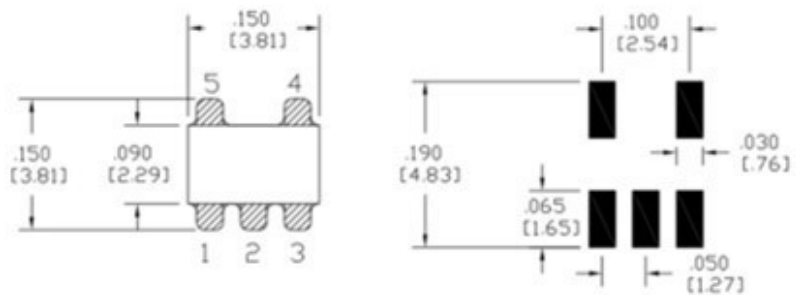
Tel. 408 228-3533
www.minirf.com

Pin Out

- 1 - SECONDARY (OUTPUT 2)
- 2 - DC BIAS INPUT (AC GROUND)
- 3 - SECONDARY DOT (OUTPUT 1)
- 4 - PRIMARY DOT (INPUT)
- 5 - PRIMARY (GROUND)

S20 Package Drawing

Dimensions in inches (millimeters)



PCB FOOTPRINT

