



## MRFXF0837 BALUN



S-20D



### Features

- Frequency Range 45-1800
- 20 dB RL / 0.9 dB IL Typ.
- High Bias Current Handling
- Miniature .150" x .150" SMT package
- 1:1 Transformer 75  $\Omega$  Impedance

### Applications

- CATV Networks
- Broadband Systems

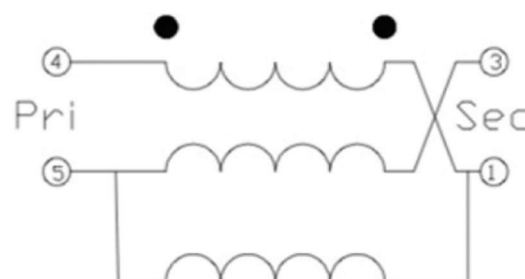
### Specifications

Parameter	Specification			Units
	Min	Typ.	Max.	
Operating Frequency Range	45		1800	MHz
Insertion Loss:				
45 – 1200 MHz		0.5	0.9	dB
1200 – 1800 MHz		0.9	1.4	
Amplitude Balance:				
45 – 1200 MHz		0.2	0.4	dB
1200 – 1800 MHz		0.5	0.8	
Phase Balance				
45 – 1200 MHz		2	4	Degrees
1200 – 1800 MHz		4	8	
Input Return Loss:				
45 – 1400 MHz	20	23		dB
1400 – 1800 MHz	17	20		
Nominal Impedance	75 $\Omega$			
Impedance Ratio	1:1			
Transformer Type	Unbalanced to Balanced			
Package	20D			

### Product Description

The MRFXF0837 was designed for CATV networks and broadband applications that require repeatable and reliable performance to 2 GHz. The balun offers excellent return loss and low insertion loss for balance to single-ended RF applications. The MRFXF0837 is low-cost, surface mount, lead-free, and RoHS compliant. The balun uses welded-wire construction for increased reliability. 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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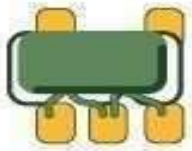
### Absolute Maximum Ratings

Power Handling	3W
DC Current	400 mA
Operating Temp	-40°C to +85°C
Storage Temp	-40°C to +100°C

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# MiniRF

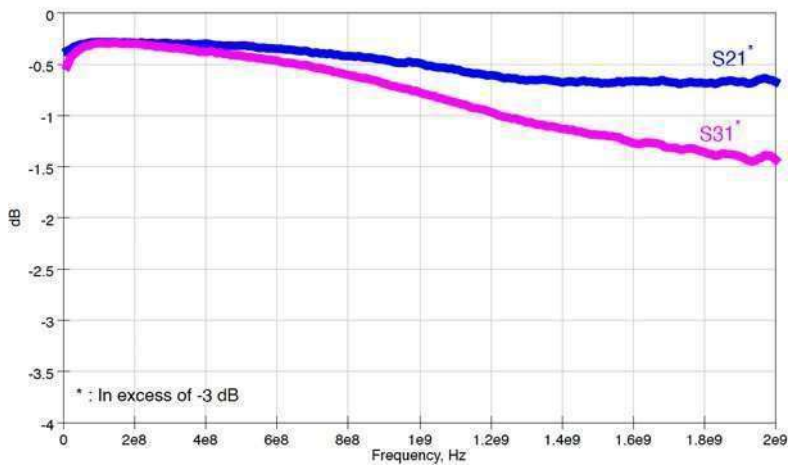
## MRFXF0837

### BALUN

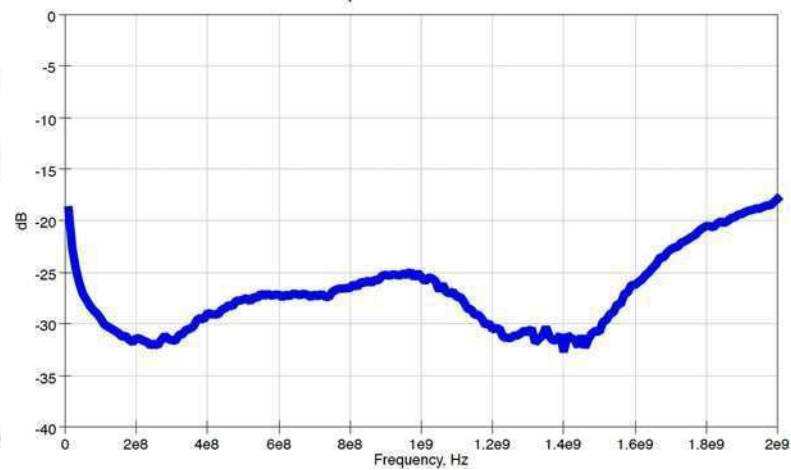


### Typical Data

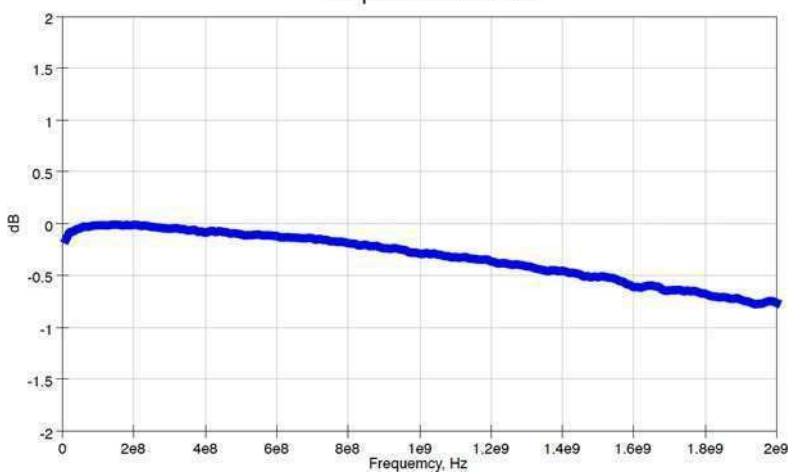
Insertion Loss



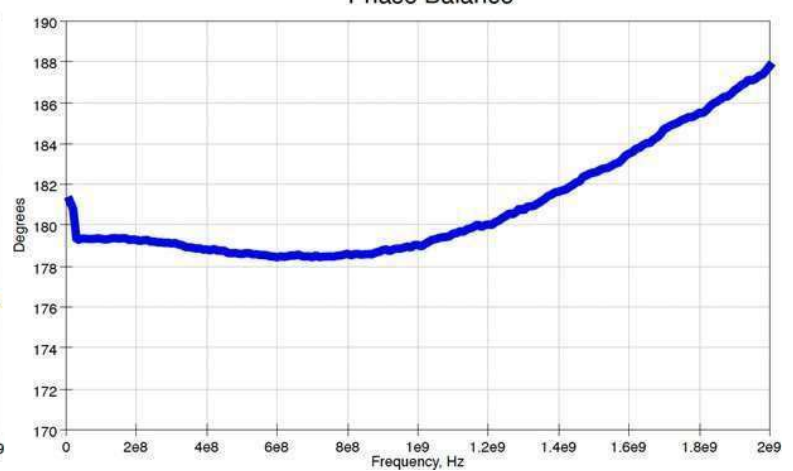
Input Return Loss



Amplitude Balance



Phase Balance



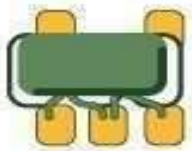
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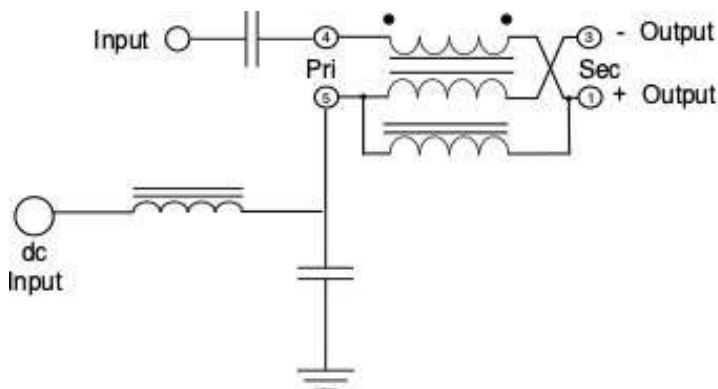
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#### Pin Out

PIN	FUNCTION
1	SECONDARY DOT (OUTPUT 1)
2	NC
3	SECONDARY (OUTPUT 2)
4	PRIMARY DOT (Input)
5	PRIMARY (Ground)

#### Typical DC Bias Configuration



20D-1000 20D-1000 20D-1000 20D-1000 20D-1000 20D-1000

#### 20D Package Drawing

Dimensions in inches (millimeters)

