

**20 MHz to 1,000 MHz Balun at 50 Ohm to 25 Ohm  
 Rated to 100 Watts in a SMT (Surface Mount) Pack-  
 age**

The FMBL1002 is part of a family of 100 watt surface mount baluns. It converts between a 50 ohm unbalanced signal (one signal referenced to ground) and balance signals (two 50 Ohm signals referenced to each other, 25 Ohms referenced to ground). These baluns have many useful applications. For example, when matching to low impedances (like transistors), these baluns allows improved matching to applications like push-pull amplifiers with improved bandwidth, and losses while providing second harmonic cancelation.



**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	20		1,000	MHz
Unbalanced Impedance		50		Ohms
Balanced Impedance		25		Ohms
Insertion Loss			0.5	dB
VSWR			1.3:1	
Nominal Phase Difference		180		Degrees
Phase Balance		±6		Degrees
Amplitude Balance		±0.45		dB
Input Power (CW)			100	Watts

**Mechanical Specifications**

Size	
Length	1.15 in [29.21 mm]
Width	1.1 in [27.94 mm]
Height	0.45 in [11.43 mm]
Package Type	Surface Mount

**Environmental Specifications**

Temperature	
Operating Range	-55 to 85 deg C

**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

RoHS Compliant	Yes
REACH Compliant	06/14/2014

**Plotted and Other Data**

Notes:

**Features:**

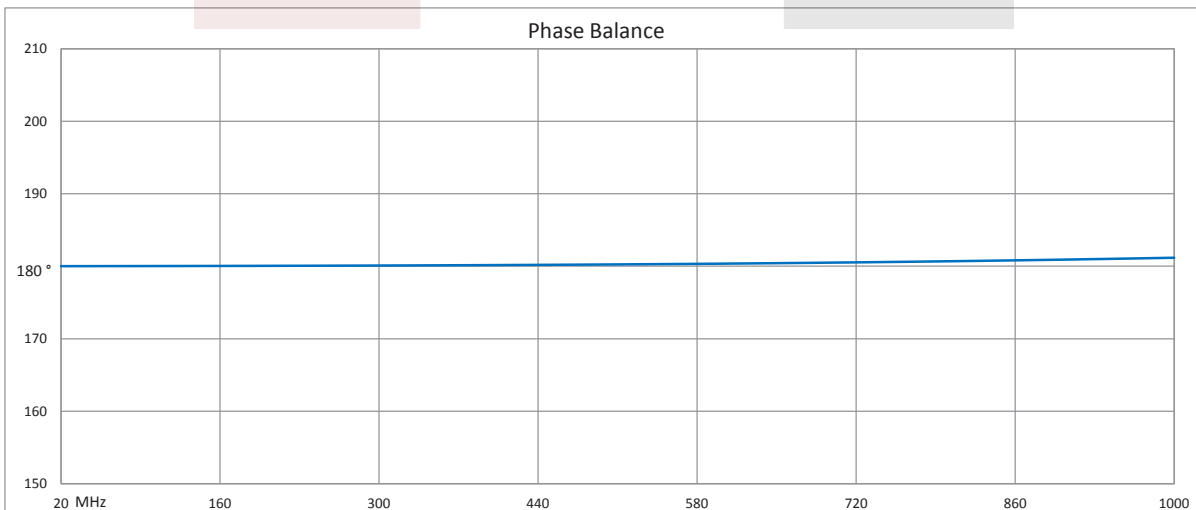
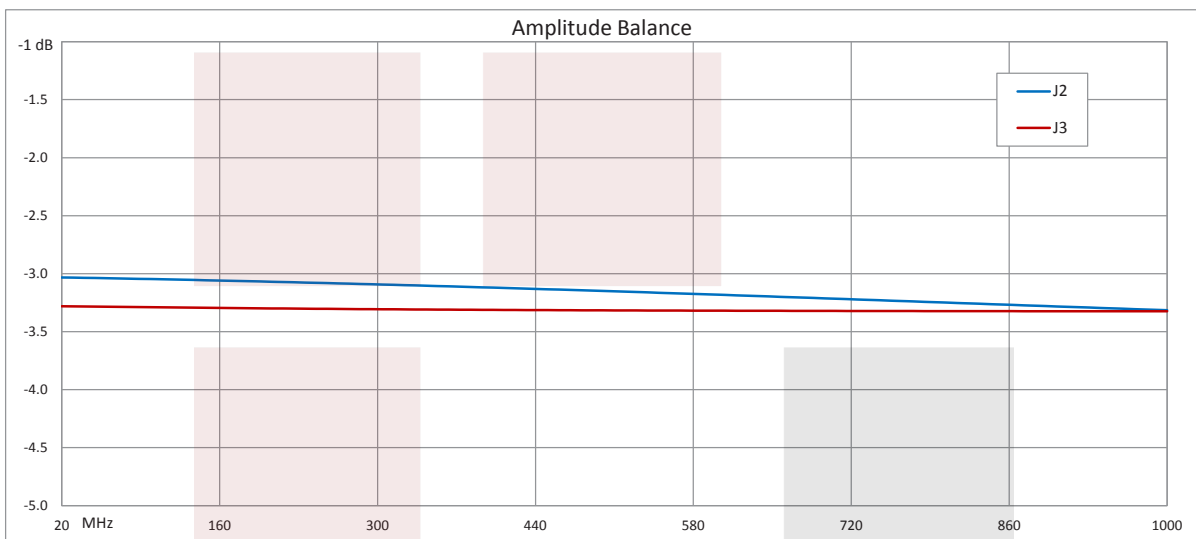
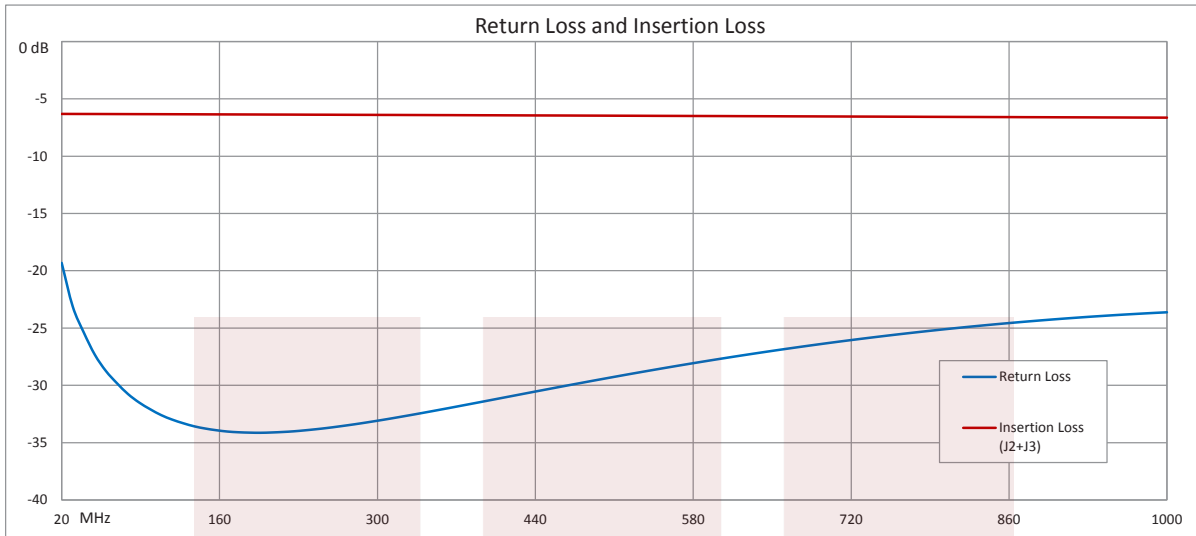
- 20 to 1000 MHz Frequency Range
- Surface Mount Device
- 50 ohm unbalanced to 25 ohm balanced

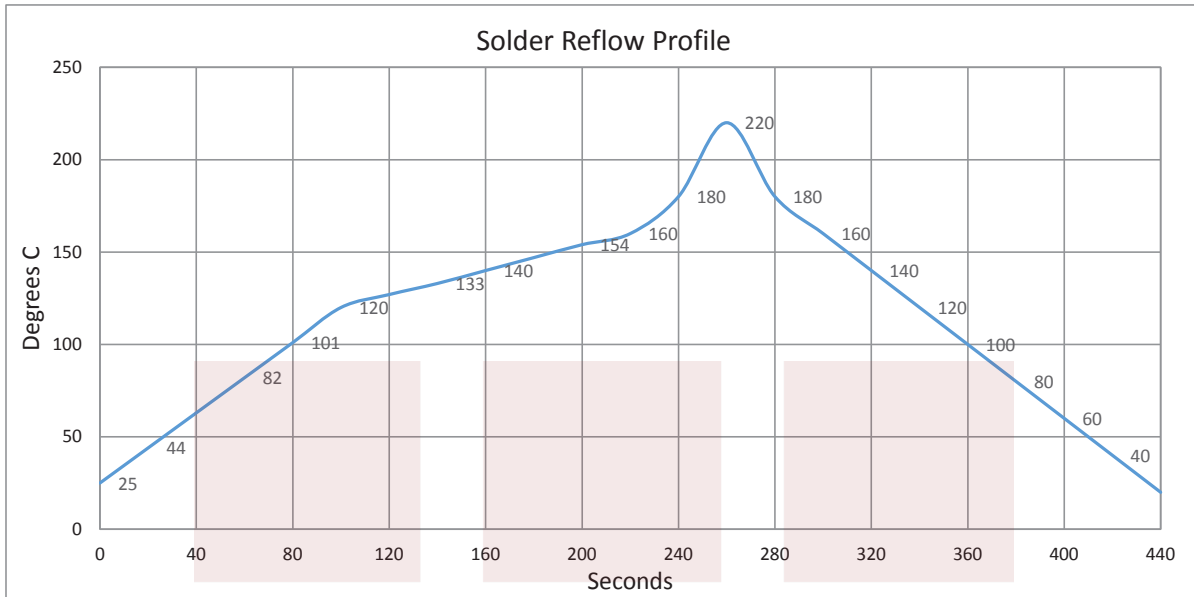
**Applications:**

- Push-Pull Amplifiers
- Antenna Drivers
- Amateur Radio
- Commercial
- Military

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**Typical Performance Data**



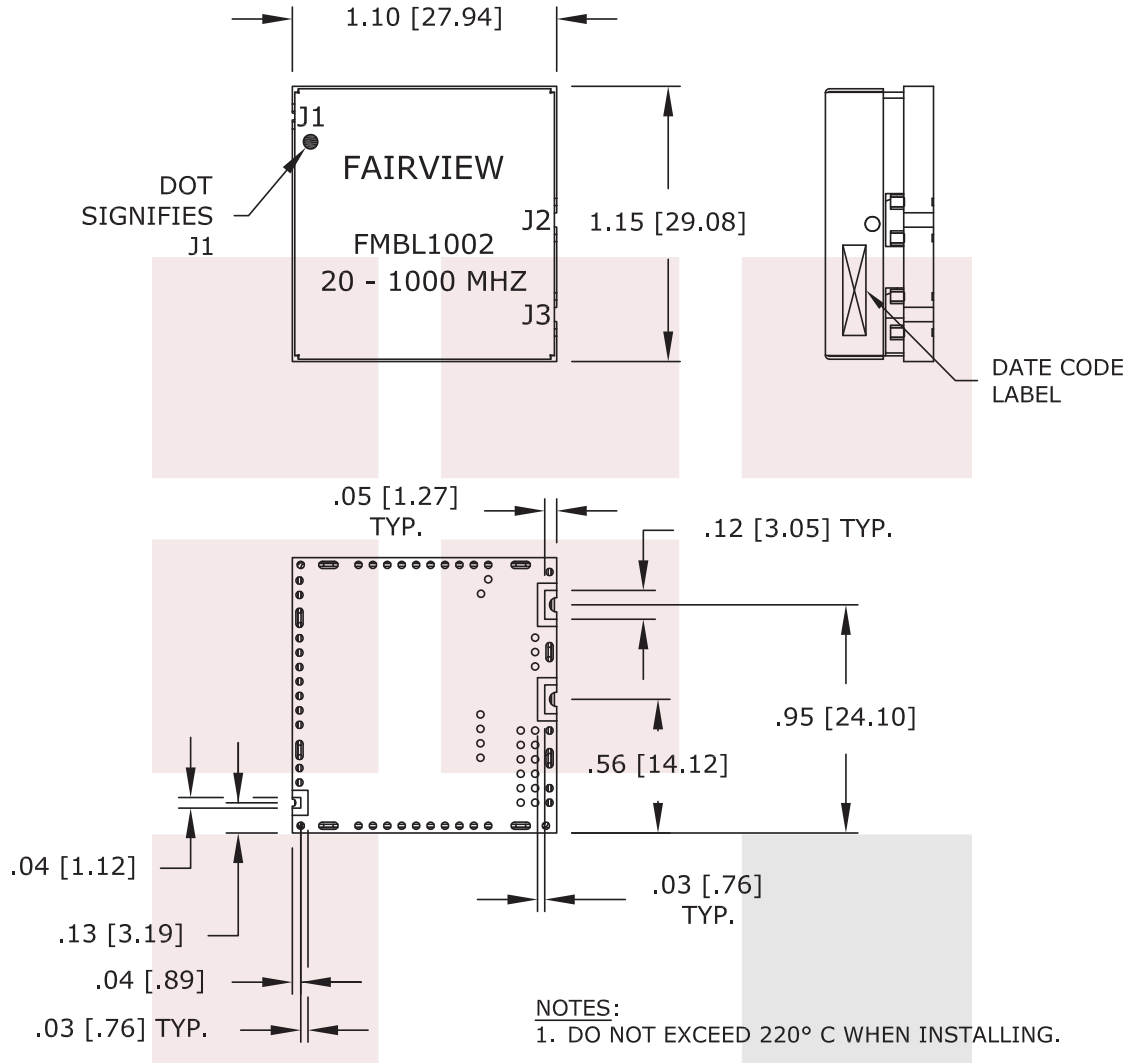


20 MHz to 1,000 MHz Balun at 50 Ohm to 25 Ohm Rated to 100 Watts in a SMT (Surface Mount) Package from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [20 MHz to 1,000 MHz Balun at 50 Ohm to 25 Ohm Rated to 100 Watts in a SMT \(Surface Mount\) Package FMBL1002](http://www.fairviewmicrowave.com/20-mhz-1000-mhz-balun-50-25-ohm-100-watts-smt-fmbl1002-p.aspx)

URL: <http://www.fairviewmicrowave.com/20-mhz-1000-mhz-balun-50-25-ohm-100-watts-smt-fmbl1002-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



TOLERANCE	.XX ±.02
	.XXX ±.010
	ANG. ±1/2°

J1	J2	J3
50 Ohm	25 Ohm	25 Ohm

\* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

**FAIRVIEW MICROWAVE INC.**

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NOTES:  
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
 3. DIMENSIONS ARE IN INCHES [mm].

TITLE	DWG NO	CAGE CODE
20 MHz to 1,000 MHz Balun at 50 Ohm to 25 Ohm Rated to 100 Watts in a SMT (Surface Mount) Package	FMBL1002	3FKR5
CAD FILE	SHEET	SCALE N/A
081715		SIZE A
		2233