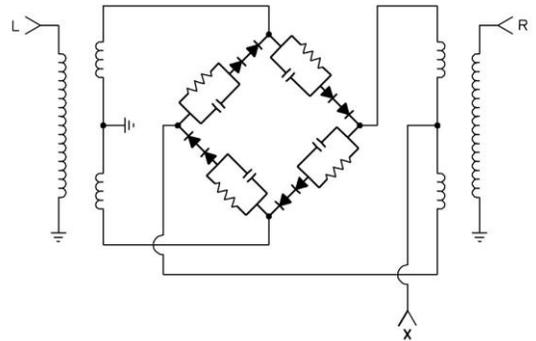


DMG-10B-300– DOUBLE BALANCED MIXER

TECHNICAL FEATURE

FEATURES

- 10 to 600 MHz
- +20 to +27 dBm LO
- +30 dBm Third Order Intercept
- Class III Mixer
- SMD

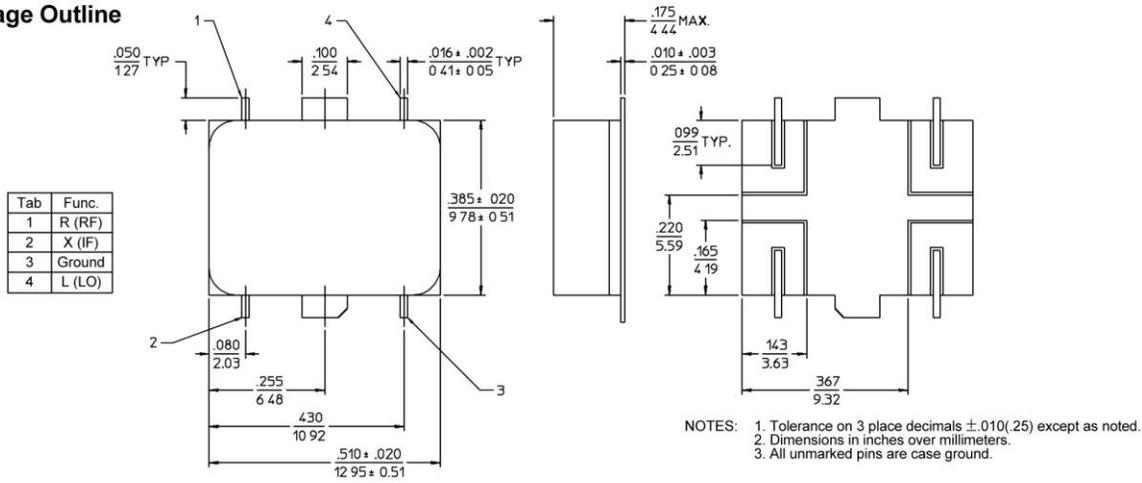


PRINCIPAL SPECIFICATIONS

Model Number	RF/LO Freq., MHz	Operating Range, MHz	IF Frequency, MHz	Conversion Loss, dB		Port Isolation, Min. dB			Polarity Sense
				Max.	Typ.	L-R	L-X	R-X	
DMG-10B-300	10 - 600	10 - 300	10 - 200	7.5	6.0	35	25	25	Pos.
		10 - 600	1 - 500	9.0	7.0	25	20	20	

All specifications are as measured in a 50Ω system, at nominal LO power, in a down converter application.

Package Outline



General Notes:

1. The DMG-10B-300 Double Balanced Mixer covers the frequency range of 10 to 600 MHz using a Class III ring modulator with integral series RC networks. This yields a mixer with high third order intercept points over a wide range of LO power.
2. Merrimac offers a broad selection Double Balanced Mixers ideal for a variety of signal processing functions with frequencies ranging from 20 kHz to 20 GHz and for applications from routine to very special.
3. Merrimac mixers comply with MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

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GENERAL SPECIFICATIONS

LO Drive:	+25 dBm nom.
Impedance:	50 Ω nom.
Noise Figure:	Within ±1 dB of Conversion Loss
1 dB Comp. Point:	+20 dBm input typ.
Input Intercept Point:	+30 dBm typ.
IF Rolloff below 1 MHz:	1 dB nom. @ DC
Maximum Input Power:	900 mW @ 25°C (derate linearly to 0 mW @ 125°C)
DC Offset Voltage:	8 mV typ.
Weight:	0.1 oz (2.8 g)
Operating Temperature:	-55° to +85°C

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