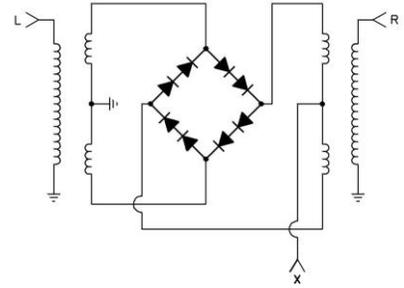


DMF-8A SERIES – DOUBLE BALANCED MIXER

TECHNICAL FEATURE

FEATURES

- 500 kHz to 2 GHz
- +17 to +23 dBm LO
- +25 dBm Third Order Intercept
- Flatpack

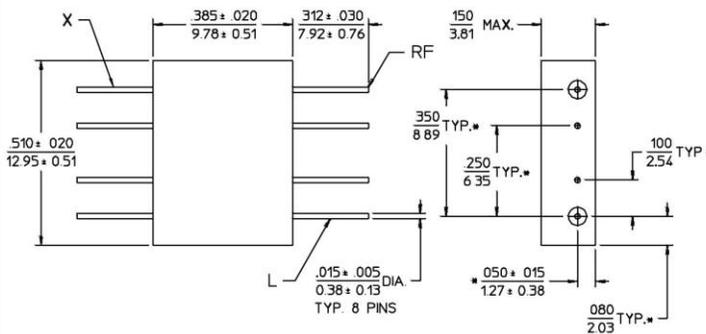


PRINCIPAL SPECIFICATIONS

Model Number	RF/LO Frequency, MHz	IF Frequency, MHz	Operating Range, MHz	Conversion Loss, dB		Port Isolation, Min. dB			Polarity Sense
				Max.	Typ.	L-R	L-X	R-X	
DMF-8A-250	0.5 - 500	DC - 500	0.5 - 1	8.0	7.0	40	30	23	Pos.
			1 - 300	7.0	6.0	40	30	23	
			300 - 500	8.0	7.0	35	20	20	
DMF-8A-500	10 - 1000	DC - 1000	10 - 50	7.5	6.5	35	30	25	Pos.
			50 - 500	7.5	6.5	30	25	20	
			500 - 1000	8.5	7.5	25	15	15	
DMF-8A-700	10 - 1500	DC - 1000	10 - 600	8.0	7.0	30	20	15	Neg.
			600 - 1000	8.0	7.0	20	12	15	
			1000 - 1500	9.5	8.5	20	12	8	
DMF-8A-1700	500 - 2000	DC - 1000	500 - 2000	8.0	6.0	25	25	15	Neg.

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

Package Outline



- NOTES:
1. Tolerance on 3 place decimals ±.010(25) except as noted.
 2. Dimensions in inches over millimeters.
 3. Dimensions marked with * apply only at body.
 4. All unmarked pins are case ground.

GENERAL SPECIFICATIONS

LO Drive:	+20 dBm nom.
Impedance:	50 Ω nom.
Noise Figure:	Within ±1 dB of Conversion Loss
1 dB Comp. Point:	+13 dBm input typ.
Input Intercept Point:	+25 dBm typ.
Maximum Input Power:	600 mW @ 25°C (derate linearly to 0 mW @ 125°C)
DC Offset Voltage:	5 mV typ.
Weight:	0.1 oz (2.8 g)
Operating Temperature:	-55° to +85°C

General Notes:

1. The DMF-8A series of Double Balanced Mixers covers the frequency range of 0.5 to 2000 MHz using an eight diode ring modulator to produce a high level mixer with high third order intercept points.
2. Merrimac offers a broad selection of Double Balanced Mixers ideal for a variety of signal processing functions with frequencies ranging from 20 kHz to 20 GHz and for applications from the routine to the 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.

29Apr96

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DMF8A.doc. This revision supersedes all previous releases. All technical information is believed to be accurate, but no responsibility is assumed for errors. We reserve the right to make changes in products or specifications without notice. Copyright © 2013 Crane Electronics, Inc. All rights reserved.

