

# DMF-2R & DMF-4R-5000 DOUBLE BALANCED MIXERS

2 to 8 GHz / +7 to +13 dBm LO / Wideband / Hi-Rel Hermetic Package



## PRINCIPAL SPECIFICATIONS

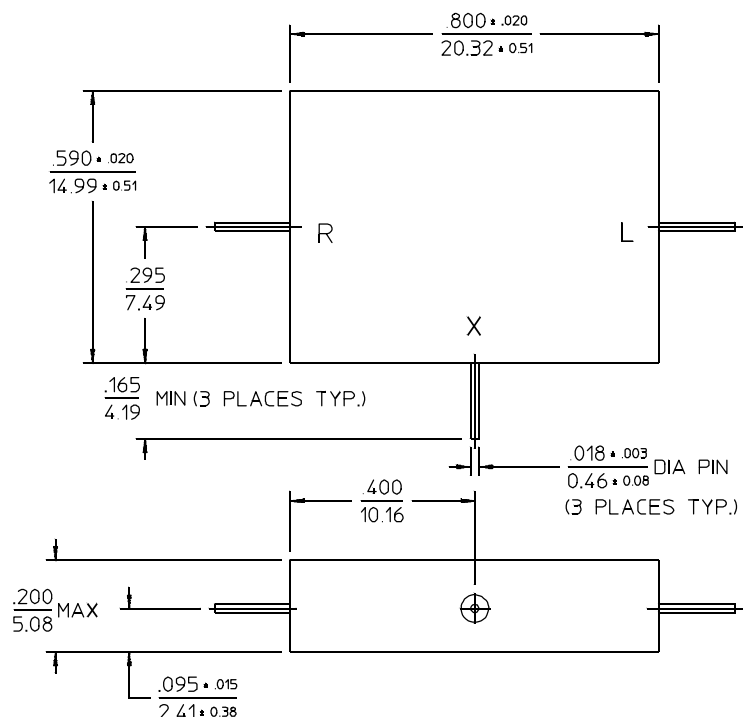
Model Number	RF/LO Freq., GHz	IF Freq. Range, GHz*	Operating Range, GHz	LO Drive, dBm, Nom.	Input Intercept Point**, dBm	1 dB Comp. Point, dBm, Typ.	Conv. Loss, dB, Max. Typ.	Port Isol., Min. L-R L-X R-X dB	Pol. Sense
DMF-2R-5000	2 - 8	DC - 1.5	2 - 6 6 - 8	+7	+13 dBm	0	7.0 6.0 8.0 6.5	30 15 15 30 15 15	Pos
DMF-4R-5000	2 - 8	DC - 1.5	2 - 6 6 - 8	+13	+18 dBm	+8	7.0 6.0 8.0 6.5	30 15 15 30 15 15	Pos

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

\*At the -1 dB points

\*\*Typical with each tone at -10 dBm

## Package Outline



NOTES: 1. Tolerance on 3 place decimals  $\pm 0.010(.25)$  except as noted.  
2. Dimensions in inches over millimeters.

## GENERAL SPECIFICATIONS

Impedance: 50 Ω nom.

Maximum Input Power: 300 mW @ 25°C  
(Derate linearly to 0 mW @ 125°C)

Weight, nominal: 0.45 oz (13 g)

Operating Temperature: -55° to +85°C

## General Notes:

1. The DMF-2R-5000 and DMF-4R-5000 Double Balanced Mixers cover the frequency range of 2 to 8 GHz using microwave techniques and specially selected diodes to achieve wide bandwidth with other desirable high performance characteristics.

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 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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