DMF-8A Series

DOUBLE BALANCED MIXERS

500 kHz to 2 GHz /+ 17 to + 23 dBmLO/+ 25 dBmThird Order Intercept / Flatpack



PRINCIPAL SPECIFICATIONS									
Model Number	RF/LO Frequency, MHz	IF Frequency, MHz	Operating Range, MHz	Conve Loss, Max.	ersion , dB, Typ.	Port I L-R dB	solatio L-X dB	n, Min. R-X dB	Polarity Sense
DMF-8A-250	0.5 - 500	DC - 500	0.5 - 1 1 - 300 300 - 500	8.0 7.0 8.0	7.0 6.0 7.0	40 40 35	30 30 20	23 23 20	Pos.
DMF-8A-500	10 - 1000	DC - 1000	10 - 50 50 - 500 500 -1000	7.5 7.5 8.5	6.5 6.5 7.5	35 30 25	30 25 15	25 20 15	Pos.
DMF-8A-700	10 - 1500	DC - 1000	10 - 600 600 -1000 1000 -1500	8.0 8.0 9.5	7.0 7.0 8.5	30 20 20	20 12 12	15 15 8	Neg.
DMF-8A-1700	500 - 2000	DC - 1000	500 - 2000	8.0	6.0	25	25	15	Neg.
All specifications are as measured in a 50 2 system, at nominal LO power, in a down converter application									



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: (derate linearly	600 mW @ 25°C 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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