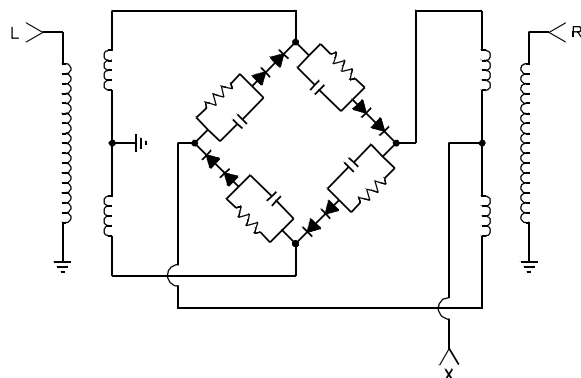


DMF-10A-300

DOUBLE BALANCED MIXER

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

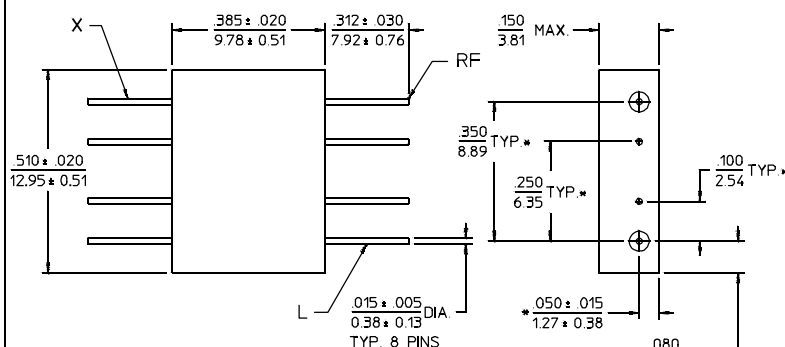


PRINCIPAL SPECIFICATIONS

Model Number	RF/LO Frequency, MHz	Operating Range, MHz	IF Frequency, MHz	Conversion Loss, dB,		Port Isolation, Min.			Polarity Sense
				Max.	Typ.	L-R dB	L-X dB	R-X dB	
DMF-10A-300	10 - 600	10 - 300	10 - 200	7.5	6.0	35	25	25	Positive
		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



- NOTES: 1. Tolerance on 3 place decimals ± 0.010 (.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:	+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

General Notes:

1. The DMF-10A-300 Double Balanced Mixer uses a Class III ring modulator with integral series RC networks. This yields a mixer with a high third order intercept point across a wide range of LO power.
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.
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