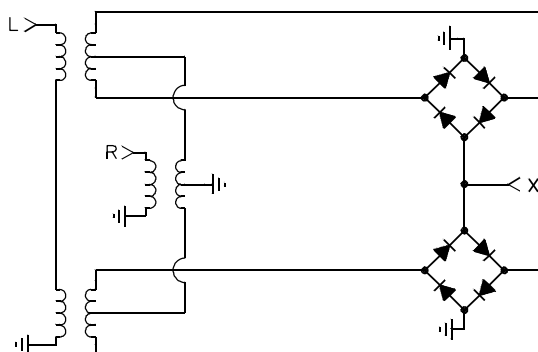


DMH-4R-1000

DOUBLE BALANCED MIXER

10 to 2500 MHz / +7 to +17 dBm LO / Wide BW / Low Distortion / PCS Applications / Half Relay

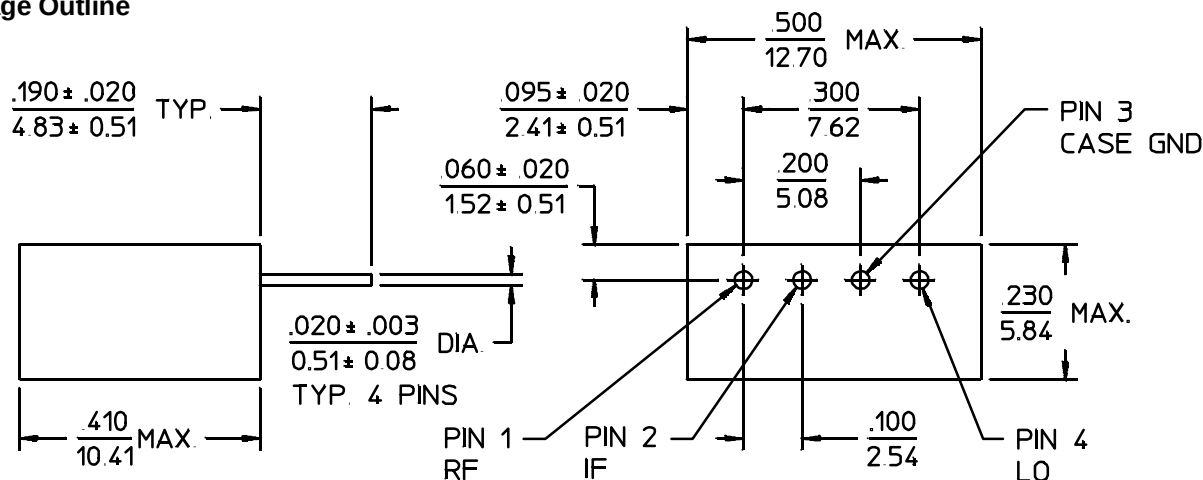


PRINCIPAL SPECIFICATIONS

Model Number	RF/LO Frequency, MHz	*IF Frequency, MHz	Operating Range, MHz	Conversion Loss, dB,		Port Isolation, Min.			Polarity Sense
				Max.	Typ.	L-R dB	L-X dB	R-X dB	
DMH-4R-1000	10 - 2500	10 - 500	10 - 500	9.0	8.5	35	30	20	Positive
			500 - 1000	9.0	8.0	30	25	20	
			1000 - 2500	10.0	8.5	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 $\pm 0.010(.25)$ 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 Notes:

1. The DMH-4R-1000 Double Balanced Mixer covers the frequency band of 10 to 2500 MHz using two parallel ring modulators to produce a wide bandwidth circuit with very low intermodulation. This mixer is ideal for cellular radio receiver systems. Although designed for drive levels of +13 dBm, it operates well at drive levels ranging from +7 to +17 dBm.
2. This mixer is provided in a half relay package that may be mounted directly to the PCB. In situations where component height is a constraint, the leads may be conformally formed allowing the package to be soldered flush to the PCB.
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:	+13 dBm nom.
Impedance:	50 Ω nom.
Noise Figure:	Within ± 1 dB of Conversion Loss
Maximum Input Power:	600 mW @ 25°C (derate linearly to 0 mW @ 125°C)
1 dB Compression Point:	+7 dBm input, typ.
Input Intercept Point:	+19 dBm typ.
DC Offset Voltage:	8 mV typ.
Weight:	0.1 oz (2.8 g)
Operating Temperature:	-55° to +85°C