

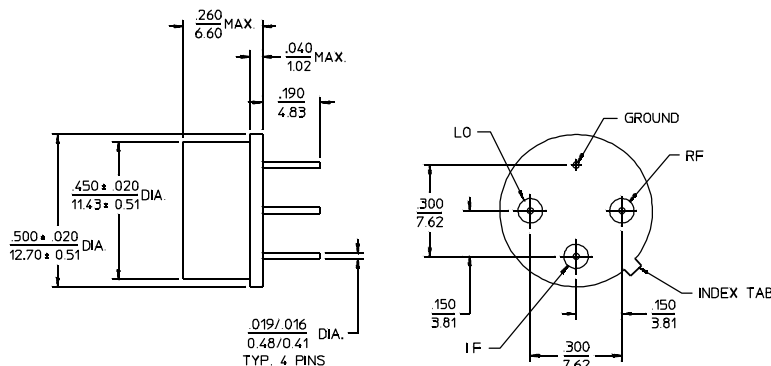


### PRINCIPAL SPECIFICATIONS

Model Number	RF/LO Freq., MHz	IF Freq., MHz	Operating Range, MHz	Conversion Loss, dB		Port Isolation, Typ. dB			VSWR Typ.	
				Max.	Typ.	L-R	L-X	R-X	LO	RF
DMT-2C-4000	2500 - 6500	DC - 2500	2500 - 3000	7.0	5.0	35	20	15	1.5:1	1.7:1
			3000 - 4000	7.0	4.5	35	25	13	1.5:1	1.5:1
			4000 - 6500	7.0	4.5	30	25	13	2.5:1	1.4:1

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  $\pm .010(.25)$  except as noted.  
2. Dimensions in inches over millimeters.

### GENERAL SPECIFICATIONS

Impedance:	50 $\Omega$
LO Drive:	+7 dBm nom.
Third Order Input Intercept:	+12 dBm typ.
Noise Figure:	$\pm 1$ dB of Conversion Loss
1 dB Compression Point:	0 dBm min. (Referenced to Input)
1 dB Desensitization Point:	-2 dBm min. (Referenced to Input)
Polarity Sense:	Positive
DC Offset Voltage:	5 mV typ.
Weight, nom:	0.1 oz (2.8 g)
Operating Temperature:	-55° to +85°C

### General Notes:

- The DMT-2C-4000 Double Balanced Mixer covers the frequency range of 2.5 to 6.5 GHz using a four diode ring modulator configuration for high performance and minimum size. The TO-8 package provides high reliability at low cost.
- 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.
- Merrimac mixers comply with MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space specifications requiring the highest reliability.

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