

# DML-2B-10G

# DOUBLE BALANCED MIXER

2 to 18 GHz / +7 to 10 dBm LO / Low Conv. Loss / Wideband IF / Hermetic Pkg with Removable SMA



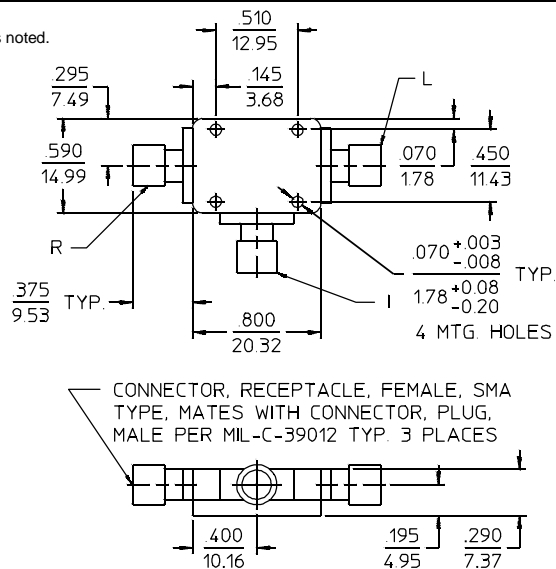
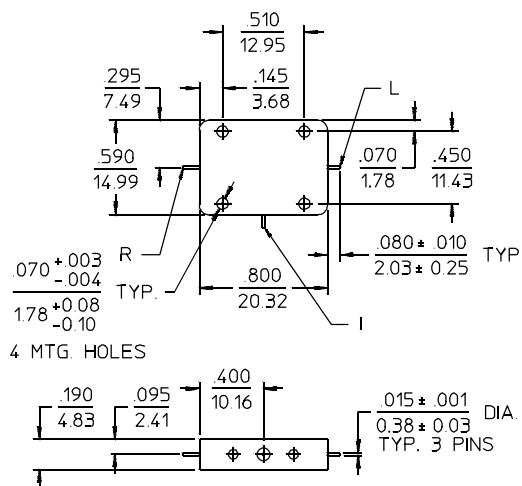
## PRINCIPAL SPECIFICATIONS

Model Number	RF/LO Frequency, GHz	LO Drive Range, dBm, Nom.	IF Range, GHz	Conversion Loss, SSB, dB		Isolation, L-R, dB		Isolation, L-X, dB		Isolation, R-X, dB		VSWR Typ.	
				Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	LO	RF
DML-2B-10G	2 - 18	+7 to +10	DC - 1	8.5	5.5	20	40	18	30	18	30	2.0:1	2.0:1
			DC - 2	9.0	6.5								

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 mm.



CONNECTOR, RECEPTACLE, FEMALE, SMA TYPE, MATES WITH CONNECTOR, PLUG, MALE PER MIL-C-39012 TYP. 3 PLACES

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## General Notes:

1. The DML-2B-10G Double Balanced Mixer covers the frequency range of 2 to 18 GHz and is optimized for low loss and broad RF/LO bandwidth. The hermetic removable SMA package is used for performance testing and reliability.
2. Merrimac offers a broad selection of Double Balanced Mixers ideal for a variety of signal processing functions from 20 kHz to 20 GHz and for applications from routine to very special.
3. All 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.

## GENERAL SPECIFICATIONS

Third Order Input Intercept: +13 dBm typ.  
Noise Figure: Within  $\pm 1$  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 with SMA, nom: 0.7 oz (20 g)  
Operating Temperature: -55° to +85°C