

# DML-6B-10G – TRIPLE BALANCED MIXER

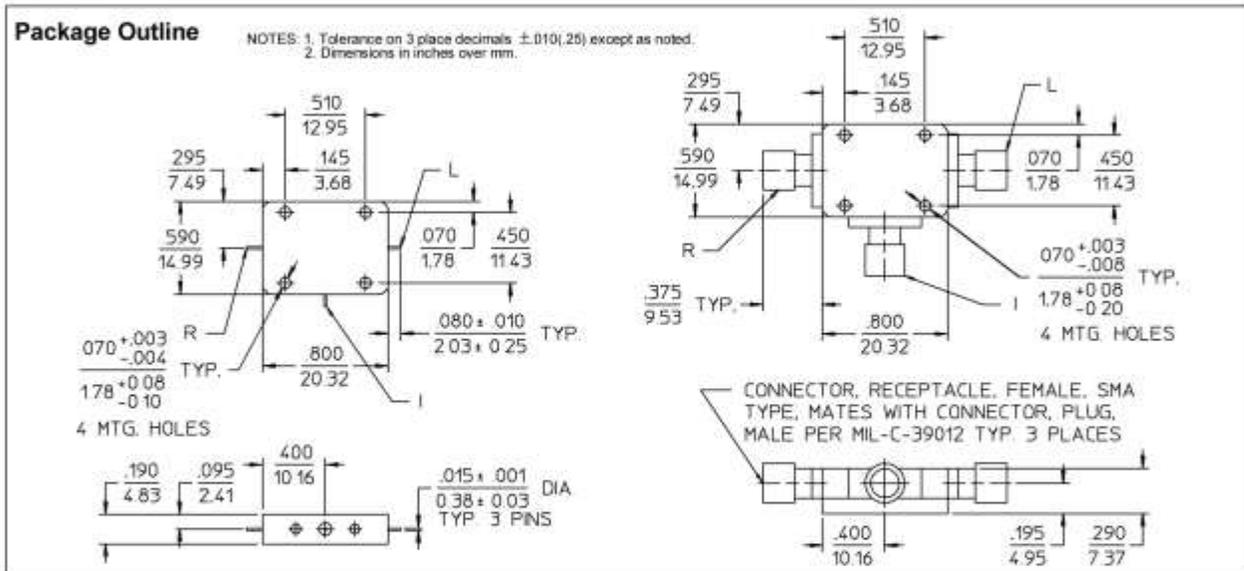
## TECHNICAL FEATURE

### FEATURES

- 2 to 18 GHz
- +10 to +13 dBm LO
- Low Conversion Loss
- Wideband IF
- Hermetic Package with Removable SMA

<b>PRINCIPAL SPECIFICATIONS</b>												
Model Number	RF/LO Frequency, GHz	LO Drive Range, dBm, Nom.	IF Range, GHz	Conversion Loss, SSB, dB, Max. Typ.	Isolation, L-R, dB, Min. Typ.	Isolation, L-X, dB, Min. Typ.	Isolation, R-X, dB, Min. Typ.	VSWR, Typ. LO	VSWR, Typ. RF			
DML-6B-10G	2 - 18	+10 to+ 13	0.5 - 8 1 - 6	10.5 7.5 9.5 6.5	20 30	20 30	20 30	2.0:1	2.0:1			

All specifications are as measured in a 50Ω system, at nominal LO Power, in a down converter application.



**General Notes:**

1. The DML-6B-10G Triple Balanced Mixer covers the frequency range of 2 to 18 GHz and is optimized for wide IF bandwidth, 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 Balanced Mixers ideal for a variety of signal processing functions from 20 kHz to 20 GHz and for applications ranging 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.

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**GENERAL SPECIFICATIONS**

Third Order Input Intercept: +15 dBm typ.  
Noise Figure: Within ±1 dB of Conversion Loss  
1 dB Compression Point: +8 dBm typ. (Referenced to Input)  
1 dB Desensitization Point: +7 dBm typ. (Referenced to Input)  
Polarity Sense: Positive  
DC Offset Voltage: 5 - 15 mV typ.  
Weight with SMA, nom: 0.7 oz (20 g)  
Operating Temperature: -55° to +85°C