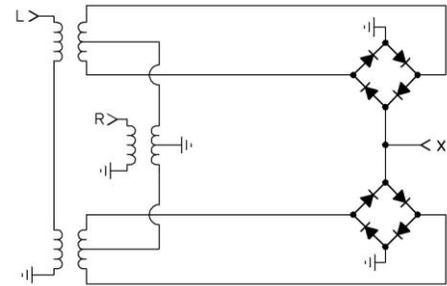


DMM-6-1500 – DOUBLE BALANCED MIXER

TECHNICAL FEATURE

FEATURES

- 10 to 3000 MHz
- +10 to +17 dBm LO
- SMA Connectors



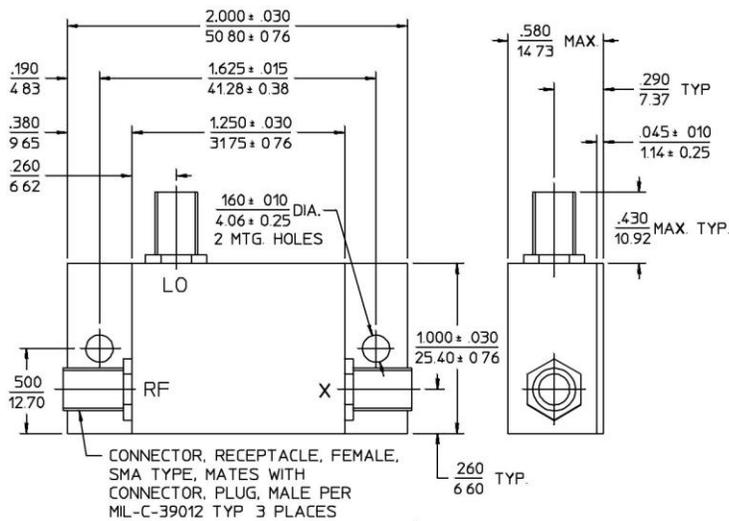
PRINCIPAL SPECIFICATIONS

| Model Number | RF/LO Frequency, MHz | LO Drive, Nom. dBm | *IF Freq., MHz | Operating Range, MHz | Conversion Loss, dB | | Port Isolation, Min. dB | | | 1 dB Compr. Point (typ.) | Input Intercept Point (typ.) |
|--------------|----------------------|--------------------|----------------|----------------------|---------------------|------|-------------------------|-----|-----|--------------------------|------------------------------|
| | | | | | Max. | Typ. | L-R | L-X | R-X | | |
| DMM-6-1500 | 10 - 3000 | +13 | 10 - 1000 | 10 - 500 | 9.0 | 8.5 | 25 | 20 | 15 | +7 dBm | +19 dBm |
| | | | | 500 - 1000 | 9.0 | 8.0 | 30 | 25 | 20 | | |
| | | | | 1000 - 3000 | 9.0 | 8.5 | 20 | 20 | 20 | | |

*IF Response extends to DC with increased conversion loss.

All specifications are as measured in a 50Ω system, at nominal LO power, in a downconverter application

Package Outline



NOTES: 1. Tolerance on 3 place decimals ±0.020(.51) except as noted.
2. Dimensions in inches over millimeters.

GENERAL SPECIFICATIONS

| | |
|------------------------|--|
| Impedance: | 50 Ω nom. |
| Polarity Sense: | Negative |
| Noise Figure: | Within ±1 dB of Conversion Loss |
| Useful LO Drive: | +10 to +17 dBm |
| Maximum Input Power: | 600 mW @25°C (derate linearly to 0 mW @125°C) |
| 1 dB Desens. Level: | +5 dBm typ. |
| DC Offset Voltage: | 8 mV typ. |
| Weight, nominal: | 1.5 oz (42 g) |
| Operating Temperature: | - 55° to +85°C |

General Notes:

1. The DMM-6-1500 Double Balanced Mixers covers the frequency range of 10 to 3000 MHz using two parallel ring modulators to produce a medium level mixer with an extremely wide bandwidth.
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 and for applications from routine to very special.
3. 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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