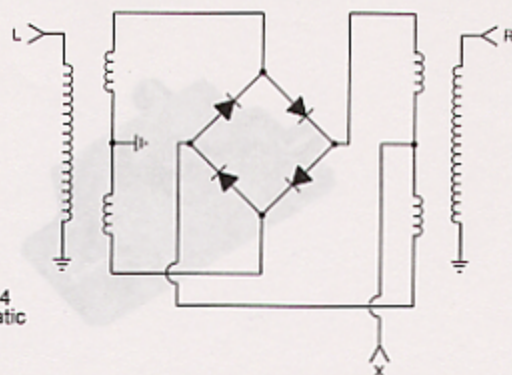
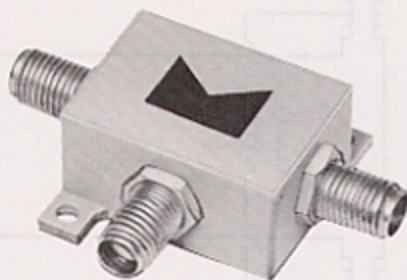


5 to 1000 MHz / +13 to +24 dBm LO / SMA Connectors

DMM-4
Schematic

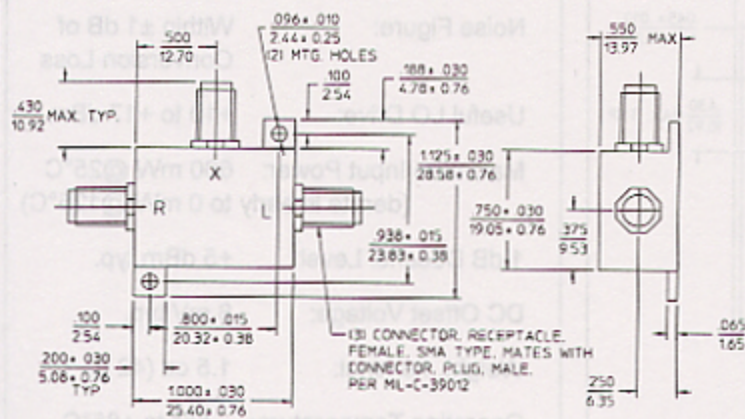
1.32

PRINCIPAL SPECIFICATIONS

| Model Number | RF/LO Frequency, MHz | LO Drive, dBm, Nom. | IF, MHz | Operating Range, MHz | Conversion Loss, dB | | Port Isolation, Min. dB | | | 1 dB Compr. Point, dBm | Input Intercept Point, dBm | 1 dB Desens. Level, dBm |
|--------------|----------------------|---------------------|---------|----------------------|---------------------|------|-------------------------|-----|-----|------------------------|----------------------------|-------------------------|
| | | | | | Max. | Typ. | L-R | L-X | R-X | | | |
| DMM-4-250 | 5 - 500 | +13 | DC-500 | 5-100 | 9.0 | 5.5 | 40 | 25 | 20 | +8 | +19 | +6 |
| | | | | 100 - 400 | 8.0 | 6.5 | 30 | 15 | 15 | | | |
| | | | | 400-500 | 9.0 | 7.5 | 30 | 15 | 15 | | | |
| DMM-12-500 | 10-1000 | +24 | DC-500 | 10-100 | 7.0 | 6.0 | 45 | 35 | — | +16 | +28 | +14 |
| | | | | 100-500 | 7.0 | 6.5 | 25 | 25 | — | | | |
| | | | | 500-1000 | 9.5 | 8.5 | 20 | 15 | — | | | |

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

Package Outline

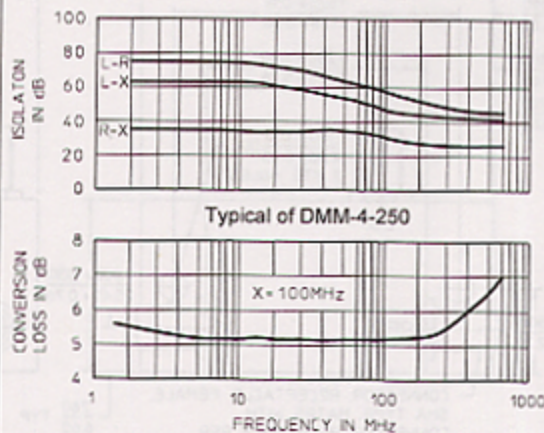


NOTES: 1. Tolerance on 3 place decimals ± 0.020 (.51) except as noted.
2. Dimensions in inches over millimeters.

General Notes:

The DMM-4-250 and DMM-12-500 Double Balanced Mixers cover the frequency range of 5 to 1000 MHz. The DMM-4-250 uses four high barrier diodes in the ring modulator to yield a mixer with high third order intercept. The DMM-12-500 mixer uses twelve high barrier diodes to achieve similarly high performance.

24May96



GENERAL SPECIFICATIONS

| | |
|------------------------|--------------------------------------|
| Impedance: | 50 Ω nom. |
| Useful LO Drive: | ± 3 dB of nominal |
| SSB Noise Figure: | Within ± 1 dB of Conversion Loss |
| DC Offset Voltage: | 5 mV typ. |
| DC Polarity: | Positive |
| Weight, nominal: | 0.65 oz (18 g) |
| Operating Temperature: | -55° to $+85^{\circ}$ C |