

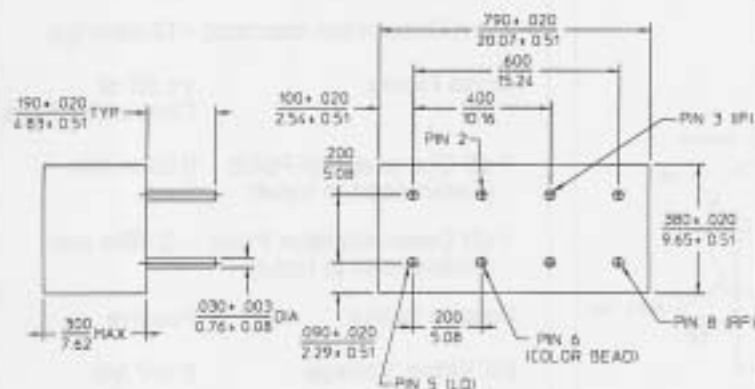
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**PRINCIPAL SPECIFICATIONS**

| Model Number | RF/LO Freq., MHz | IF Freq., MHz | Conversion Loss, dB, Max. |           | Isolation, dB, L - R Ports |           | Isolation, dB, L - X Ports |           | Isolation, dB, R - X Ports |          |
|--------------|------------------|---------------|---------------------------|-----------|----------------------------|-----------|----------------------------|-----------|----------------------------|----------|
|              |                  |               | Min.                      | Max.      | Min.                       | Max.      | Min.                       | Max.      | Min.                       | Max.     |
| DMS-2-50     | .02 - 100        | DC - 100      | 7.5                       | .02 - .10 | 45                         | .02 - 100 | 45                         | .02 - 25  | 30                         | .02 - 10 |
|              |                  |               | 6.5                       | .10 - 100 | 45                         | .02 - 100 | 35                         | 25 - 100  | 20                         | 10 - 100 |
| DMS-2-250    | 1 - 500          | DC - 500      | 7.0                       | 1 - 400   | 40                         | 1 - 100   | 35                         | 1 - 100   | 30                         | 1 - 25   |
|              |                  |               | 8.0                       | 400 - 500 | 30                         | 100 - 500 | 25                         | 100 - 500 | 20                         | 25 - 500 |

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

**Package Outline**



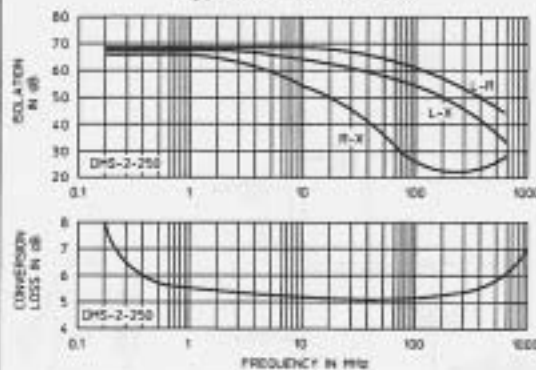
- NOTES: 1. Tolerance on 3 place decimals ±0.10(.25) except as noted.  
 2. Dimensions in inches over millimeters.  
 3. Pins 3 & 7 must be externally connected to form IF Port.  
 4. Pins 1, 2, 4 & 6 must be externally grounded.

**General Notes:**

The DMS-2 series of Double Balanced Mixers covers the frequency range of 20 kHz to 500 MHz using a four diode ring modulator configuration for general purpose applications emphasizing low cost and minimum size.

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**Typical of DMS-2 Series**



**GENERAL SPECIFICATIONS**

- Impedance: 50 Ω nom.
- Third Order Input Int: +12 dBm typ.
- Noise Figure: Within ±1 dB of Conversion Loss
- Maximum Input Power: 300 mW @ 25°C (derate linearly to 0 mW @125°C)
- LO Drive: +7 dBm nom.
- 1 dB Compress. Point: 0 dBm typ. (ref Input)
- 1 dB Desens. Level: -2 dBm typ. (ref Input)
- DC Offset Voltage: 2 mV typ.
- DC Polarity: Positive
- Weight, nominal: 0.25 oz (9 g)
- Operating Temperature: -55° to +85°C