

Level 7

1400-2500MHz Frequency Mixer

Features

- LO/RF: 1400-2500MHz
- IF: DC-500MHz
- LO Level: +7dBm
- Conversion Loss: 7.5dB
- RF Input: Up to +1dBm
- IP3: +11dBm
- SMA Connector

Picture



Description

MXR-15 is a passive double balanced mixer operates with LO drive level range of +3dBm to +7dBm.

Electrical Specifications @ +25°C, LO= +7dBm

| Parameter | Unit | Minimum | Typical | Maximum |
|----------------------|------|---------|---------|---------|
| Frequency Range | | | | |
| LO/RF | MHz | 1400 | | 2500 |
| IF | MHz | DC | | 500 |
| Conversion Loss | dB | | 7.5 | 9.0 |
| LO-RF Isolation | | | | |
| 1400-1700 MHz | dB | 30 | 35 | |
| 1700-2000 MHz | dB | 26 | 30 | |
| 2000-2500 MHz | dB | 25 | 28 | |
| LO-IF Isolation | | | | |
| 1400-1700 MHz | dB | 23 | 26 | |
| 1700-2000 MHz | dB | 23 | 25 | |
| 2000-2500 MHz | dB | 27 | 30 | |
| RF Input Power up to | dBm | | +1 | |
| IP3 (Center Band) | dBm | | +11 | |

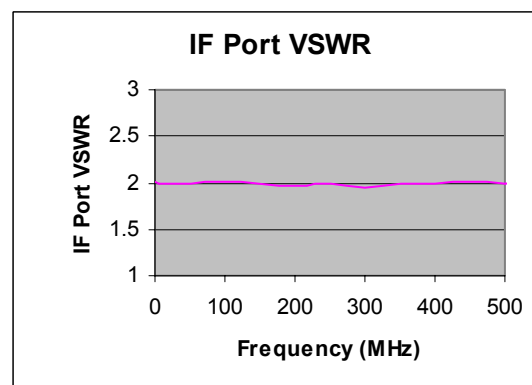
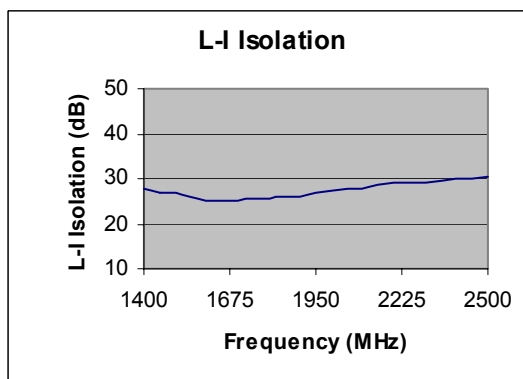
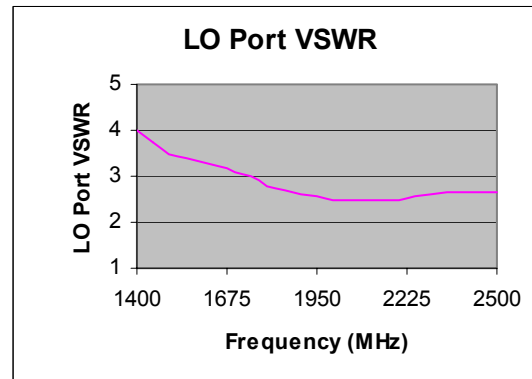
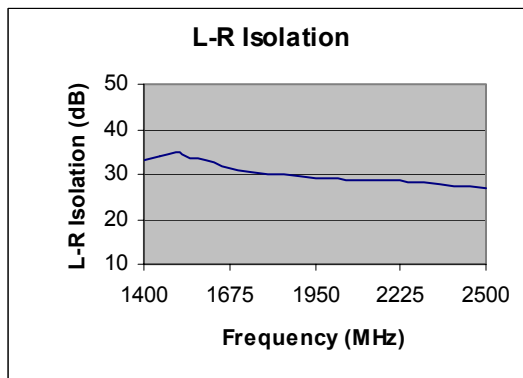
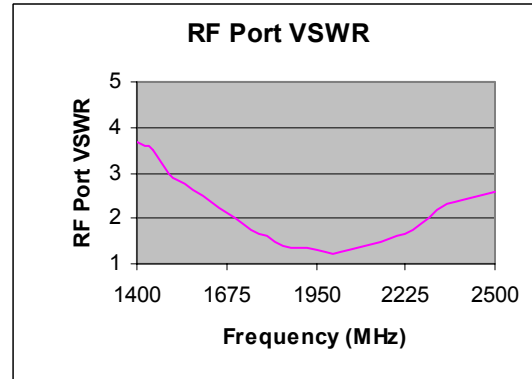
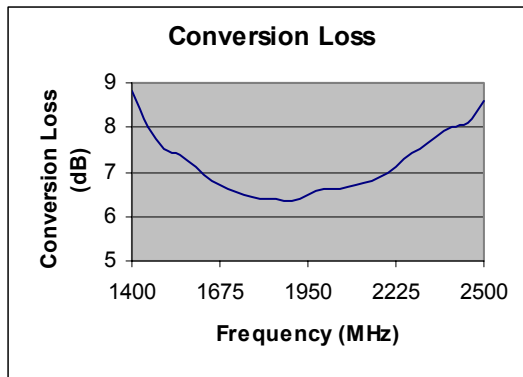
Conversion Loss Measured at IF = 60MHz

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Typical Performance @ +25 °C

LO = +7dBm



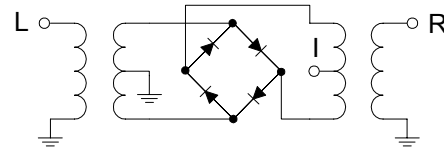
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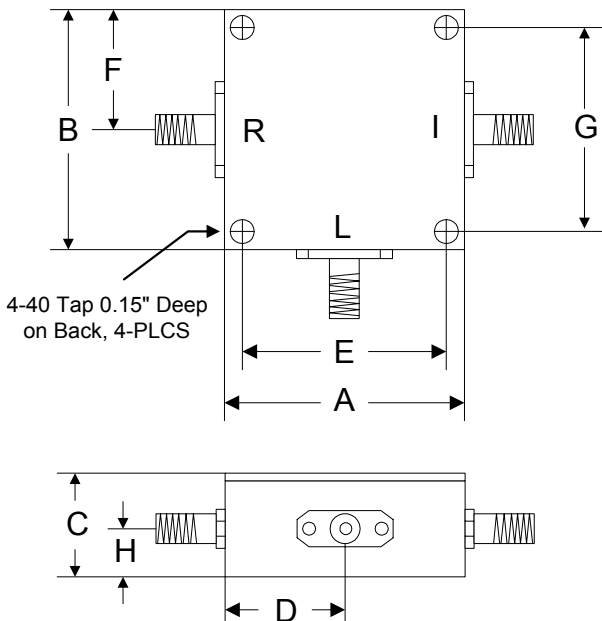
Absolute Maximum Ratings

| Parameter | Absolute Maximum |
|-----------------------|-------------------|
| RF Power | +17dBm |
| Peak IF Current | 40mA |
| Operating Temperature | -40 °C to +85 °C |
| Storage Temperature | -55 °C to +100 °C |

Schematic



Outline



| | A | B | C | D | E | F | G | H |
|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Inch | 1.250 | 1.250 | 0.563 | 0.625 | 1.000 | 0.625 | 1.000 | 0.500 |
| mm | 31.75 | 31.75 | 14.29 | 15.88 | 25.40 | 15.88 | 25.40 | 12.70 |