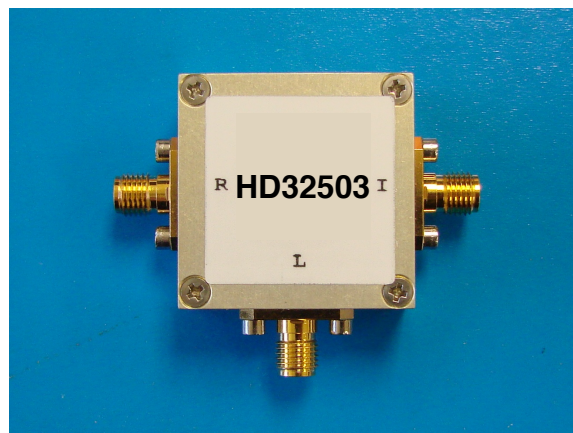


10-2200MHz Frequency Mixer

Features

- LO/RF: 10-2200MHz
- IF: DC-1800MHz
- LO Level: +17dBm
- Conversion Loss: 6.5dB
- RF Input: Up to +12dBm
- Input IP3: +25dBm
- SMA Connector

Picture



Description

HD32503 is a high IP3 passive double balanced mixer operates with LO drive level range of +14dBm to +20dBm.

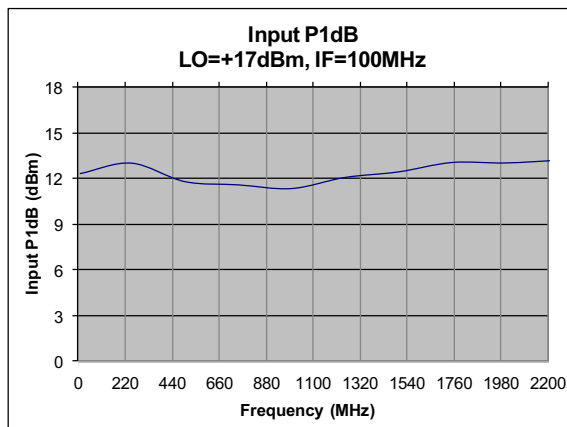
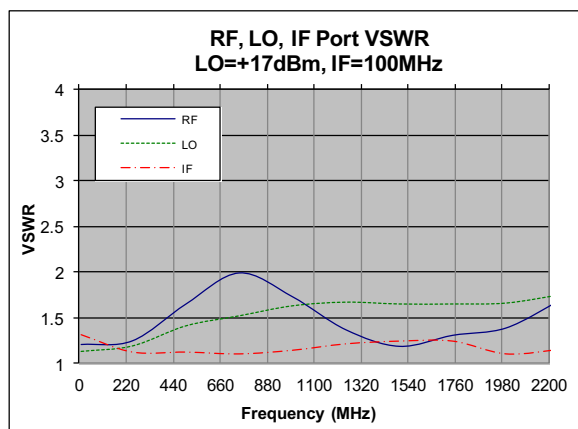
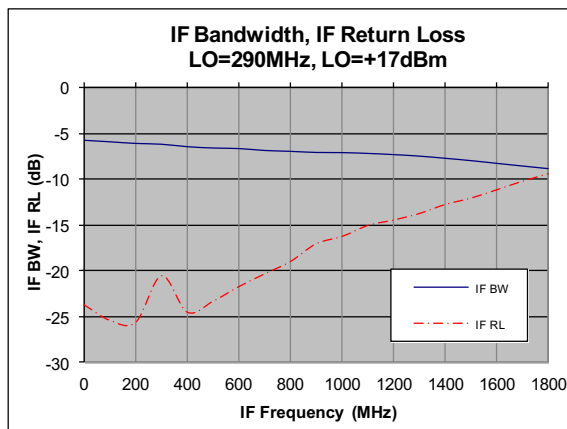
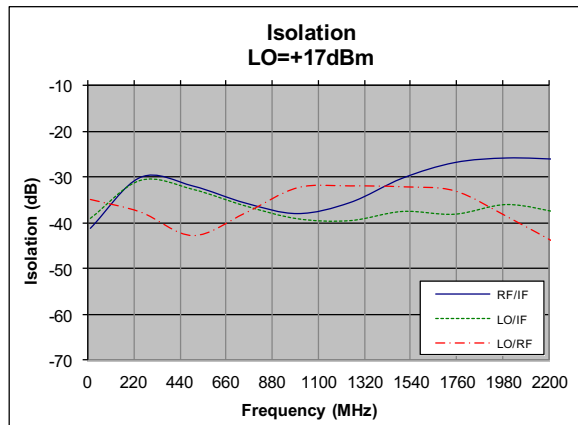
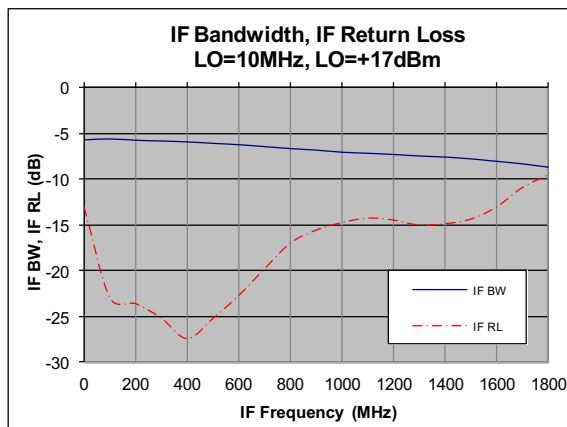
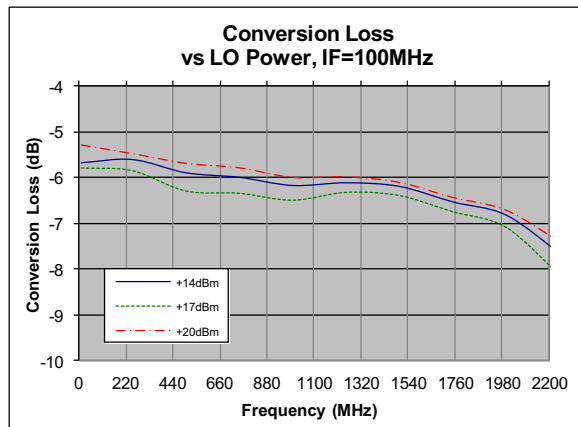
Electrical Specifications @ +25 °C, LO= +17dBm, 50 Ω

| Parameter | Unit | Minimum | Typical | Maximum |
|---------------------------------|------|---------|---------|---------|
| Frequency Range | | | | |
| LO/RF | MHz | 10 | | 2200 |
| IF | MHz | DC | | 1800 |
| Conversion Loss | dB | | 6.5 | 8.0 |
| LO-RF Isolation | dB | 25 | 32 | |
| LO-IF Isolation | dB | 28 | 35 | |
| RF-IF Isolation | dB | 25 | 30 | |
| RF Input Power P _{1dB} | dBm | | +12 | |
| IP3 (Center Band) | dBm | | +25 | |

Unless otherwise noted, all measurements performed as a downconverter.

10-2200MHz Frequency Mixer

Typical Performance @ +25 °C

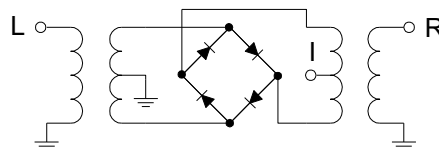


10-2200MHz Frequency Mixer

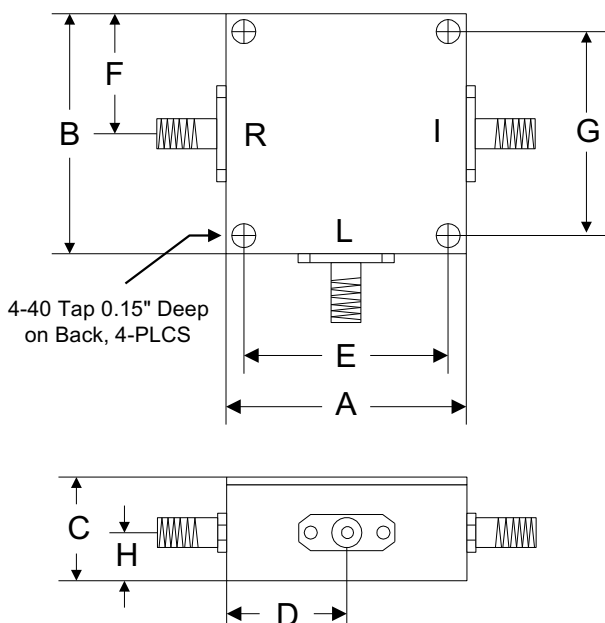
Absolute Maximum Ratings

| Parameter | Absolute Maximum |
|-----------------------|-------------------|
| RF/IF Power | +23dBm |
| LO Power | +23dBm |
| 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 | 0.250 |
| mm | 31.75 | 31.75 | 14.29 | 15.88 | 25.40 | 15.88 | 25.40 | 6.35 |