



Broadband Double-Balanced Mixers

0.7-2 GHz

MD-150/153

- 6 dB Typical Midband Conversion Loss
- 25 dB Typical Midband Isolation

Guaranteed Specifications*

(From -55°C to +85°C)

Frequency Range	RF, LO Ports	700 MHz-2 GHz
	IF Port	DC-300 MHz
Conversion Loss		** 8 dB Max
Isolation	LO to RF	(0.7-1 GHz) 23 dB Min
		(1-2 GHz) 20 dB Min
	LO to IF	(0.7-1 GHz) 20 dB Min
		(1-2 GHz) 12 dB Min
	RF to IF	(0.7-1 GHz) 23 dB Min
		(1-2 GHz) 15 dB Min

Operating Characteristics

Impedance 50 Ohms Nominal

Maximum Input

Total Power 300 mW Max @ 25°C

Derated to 85°C @ 3.2 mW/°C

IF Port Current 50 mA Max

DC Polarity Negative

DC Offset <3 mV Typical

RF Input

1 dB Compression 0 dBm Typical

1 dB Desensitization -3 dBm Typical

SSB Noise Figure Within 1 dB of Conversion Loss Max

Typical Two-Tone IM 600-2000 MHz > 36 dB

Ratio (with -10 dBm

input, each input,

25 MHz and 35 MHz IF)

Environmental

See Appendix for MIL-STD-883 screening option.

Pin Configuration

MD-153

RF; P11, LO; P8, IF; P2.

Case and all other pins are ground.

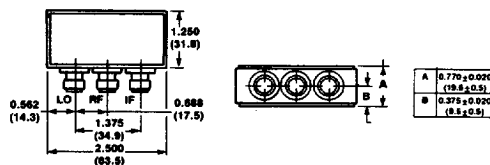
* All specifications apply when operated at +7 dBm available LO power with 50 ohm source and load impedance.

** 8.5 dB max for MD-150

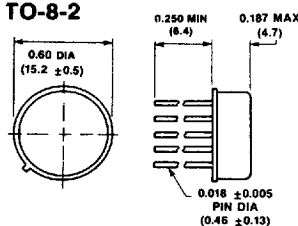
Ordering Information

Model No.	Package
MD-150 SMA	Connectorized
MD-153 PIN	Pin

C-9



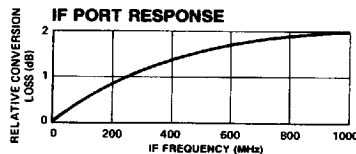
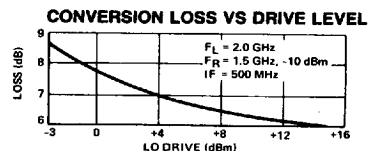
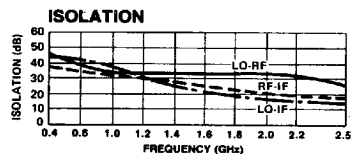
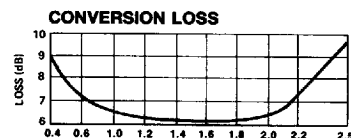
TO-8-2



Dimensions in () are in mm.

See Appendix for complete physical dimensions.

Typical Performance



Specifications Subject to Change Without Notice.

M/A-COM Inc. ■ 1011 Pawtucket Boulevard, Lowell, MA 01853 USA

■ Telephone: 800-366-2266