



Surface Mount Double-Balanced Mixer

0.5-350 MHz

MDS-221

- Fully Hermetic Package
- Low Cost, Medium Level
 - +15 dBm Typical Intercept Point
- 6 dB Typical Conversion Loss
 - +5 dBm Typical Compression Point

Guaranteed Specifications*

(From -55°C to +85°C)

Frequency Range	RF, LO Ports	0.5-350 MHz
	IF Port	DC-350 MHz
Conversion Loss	2-300 MHz	7 dB Max
	0.5-350 MHz	8 dB Max
Isolation	LO to RF (0.5-100 MHz)	35 dB Min
	(100-350 MHz)	28 dB Min
	LO to IF (0.5-100 MHz)	32 dB Min
	(100-350 MHz)	25 dB Min
	RF to IF (0.5-100 MHz)	25 dB Min
	(100-350 MHz)	18 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

RF Input
 1 dB Compression +5 dBm Typical
 1 dB Desensitization +3 dBm Typical

SSB Noise Figure Within 1 dB of Conversion Loss Max

Typical Two-Tone IM Ratio
 (with -10 dBm input, each input) ≥ 50 dB Min

Environmental
 See Appendix for MIL-STD-883 screening option.

Pin Configuration RF; P4, LO; P3, IF; P2
 Case and all other pins are ground.

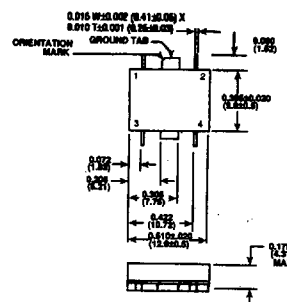
*All specifications apply when operated at +10 dBm available LO power with 50 ohm source and load impedance.

**P3 & P4 are connected together externally to make an IF Port.

Ordering Information

Model No.	Package
MDS-221 PIN	Surface Mount

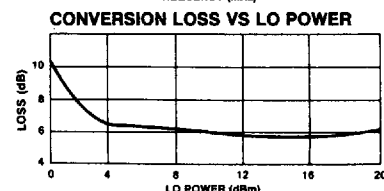
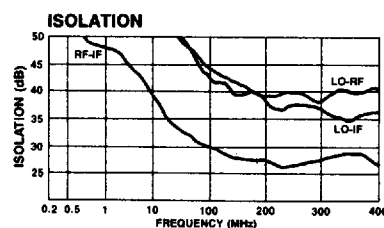
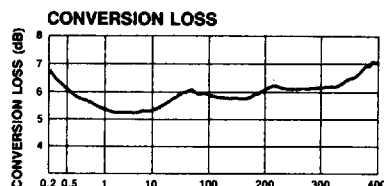
SF-1



Dimensions in () are in mm.

See Appendix for complete physical dimensions.

Typical Performance



Specifications Subject to Change Without Notice.

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