



MODEL
MDS-147

SURFACE MOUNT DOUBLE-BALANCED MIXER 10 - 1500 MHz

NEW

- Fully Hermetic Package
- +5 dBm 1 dB Compression Point
- 6 dB Typical Midband Conversion Loss
- 40 dB Typical Midband LO-RF, LO-IF Isolation

Guaranteed Specifications*

(From -55°C to +85°C)

Frequency Range	RF, LO Ports	10-1500 MHz
	IF Port	DC-1500 MHz
Conversion Loss	10-800 MHz	7.5 dB Max
	800-1500 MHz	10 dB Max
Isolation	LO to RF	(10-100 MHz) 35 dB Min (100-1000 MHz) 25 dB Min (1000-1500 MHz) 20 dB Min
	LO to IF	(10-100 MHz) 35 dB Min (100-1000 MHz) 20 dB Min (1000-1500 MHz) 12 dB Min
	RF to IF	(10-100 MHz) 30 dB Min (100-1000 MHz) 18 dB Min (1000-1500 MHz) 8 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
X Port Current 50 mA Max

DC Polarity Negative

DC Offset ≤ 10 mV Typical

RF Input
1 dB Compression +10 dBm Typical
1 dB Desensitization +8 dBm Typical

SSB Noise Figure Within 1 dB of Conversion Loss Max

Typical Two-Tone IM Ratio (with -10 dBm input, each input, 50 MHz and 60 MHz IF)** ≥ 54 dB

Package Type Surface Mount (SF-1)
(See page 490 for physical dimensions.)

Environmental
These units are designed to meet the environmental and screening requirements of Table 1A, page 496 of the Adams-Russell catalog.

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

*All specifications apply when operated at +17 dBm available LO power with 50 ohm source and load impedance.
**Measured at 1500 MHz

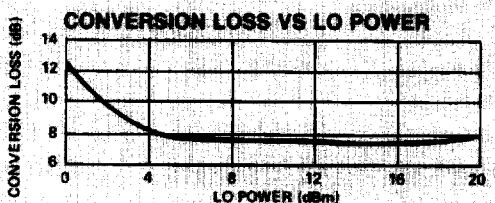
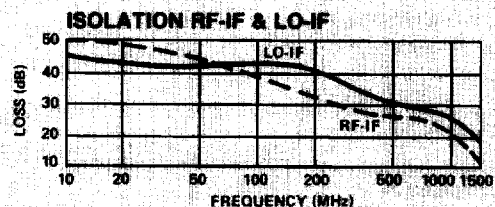
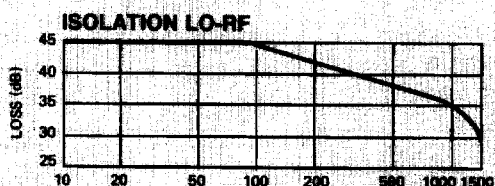
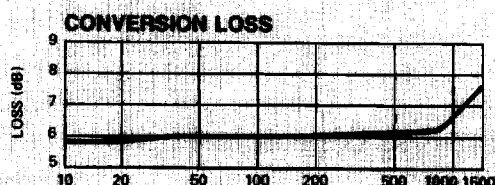
Ordering Information

Model No.	Connectors	Unit Price (5-9 Units)
MDS-147	PIN	\$86

Delivery is from stock.



Typical Performance



ANZAC

Make the Connection...

Adams Russell

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COMPONENTS GROUP

For Technical Information, Call (617) 273-3333

For Ordering Information, Call (617) 273-3333