



MODEL MD-159

DOUBLE-BALANCED MIXER 5-1000 MHz

Guaranteed VSWR

45 dB Typical Midband L-R Isolation

6 dB Typical Midband Conversion Loss

Guaranteed Specifications*

(From -55°C to +85°C)

Frequency Range	RF, LO Ports IF Port	5-1000 MHz DC-1000 MHz
Conversion Loss	10-500 MHz 5-1000 MHz	7.5 dB Max 8.5 dB Max
Isolation	5-500 MHz	500-1000 MHz
LO to RF	35 dB Min	30 dB Min
LO to IF	30 dB Min	22 dB Min
RF to IF	25 dB Min	20 dB Min
VSWR (LO, RF)	10-500 MHz	5-1000 MHz
LO Port	1.8:1 Max	2.0:1 Max
RF Port**	1.7:1 Max	3.0:1 Max
VSWR (IF Port)**	DC-100 MHz DC-500 MHz DC-1000 MHz	1.5:1 Max 2.0:1 Max 2.5:1 Max

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	Positive	
DC Offset	≤ 1 mV Typical	
RF Input	1 dB Compression 1 dB Desensitization	+ 1.5 dBm Typ - 1.5 dBm Typ
SSB Noise Figure	Within 1 dB of Conversion Loss Max	
Typical Two-Tone IM Ratio	50 dB @ 10 MHz	
(with -10 dBm input, each	50 dB @ 100 MHz	
tone and 10 MHz separation)	45 dB @ 500 MHz	
Package Type	Flatpack (FP-2)	
	(See page 474 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; P8; LO; P5; IF; P4.
Case and all other pins are ground.

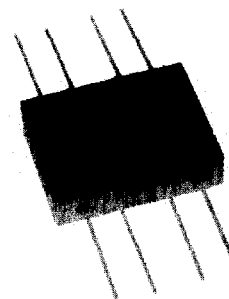
*All specifications apply when operated at +7 dBm available LO power with 50 ohm source and load impedance.

**Specified for LO power @ +7 dBm, 250 MHz; test port power @ -10 dBm.

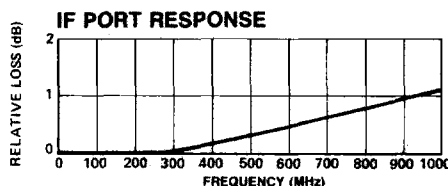
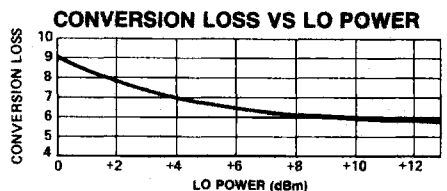
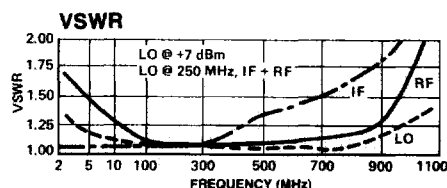
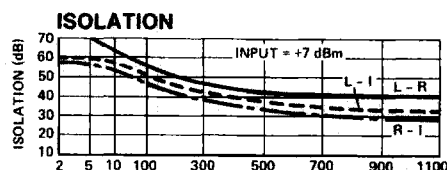
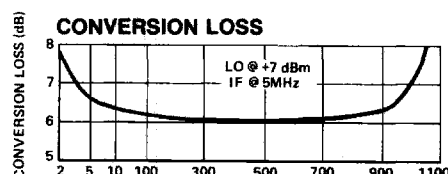
Ordering Information

Model No.	Part No.	Connectors	Unit Price (5-9 Units)
MD-159	8649	Pin	\$58

Delivery is from stock.



Typical Performance



ANZAC

Make the Connection...

Adams Russell
COMPONENTS GROUP

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For Ordering Information, Call (617) 273-3333