



MODELS
MD-/MDC-163

TERMINATION-INSENSITIVE
BIASABLE MIXER 1-6 GHz

LO DRIVE 0 dBm
Intermodulation Ratio Insensitive to IF
Port Mismatches
7 dB Typical Midband Conversion Loss

Guaranteed Specifications*

(From -55°C to +85°C)

| | | | |
|--------------------------|--------------|-------------|-----------|
| Frequency Range | RF, LO Ports | 1-6 GHz | |
| | IF Port | 10-2000 MHz | |
| Conversion Loss** | 1-3 GHz | 9.0 dB Max | |
| | 1-6 GHz | 10.5 dB Max | |
| Isolation | LO to RF | (1-2 GHz) | 10 dB Min |
| | | (2-6 GHz) | 13 dB Min |
| | LO to IF | (1-6 GHz) | 13 dB Min |
| | | RF to IF | (1-6 GHz) |

Operating Characteristics

Impedance 50 Ohms Nominal

Maximum Input
Total Power 500 mW Max @ 25°C
Derated 6.4 mW/°C
DC Bias +5, -5 VDC @ 12 mA each

RF Input
1 dB Compression -2 dBm Typical
1 dB Desensitization -6 dBm Typical

SSB Noise Figure Within 1 dB of Conversion Loss Max

3rd Order Input Intercept
2.0 GHz +7.0 dBm Typical
4.0 GHz +8.0 dBm Typical
6.0 GHz +5.0 dBm Typical

3rd Order Intercept Degradation 1.5 dB Typical @ IF Termination VSWR 3:1

Package Type MD-162 Flatback (FP-19)
MDC-162 Connectorized (C-2)
(See pages 477 and 480 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; P3; LO; P1; IF; P2.
Bias connection as marked, case ground.

*All specifications apply when operated at 0 dBm available LO power with 50 ohm source and load impedance.

**For IF frequencies of 10-500 MHz and an RF of -10 dBm or lower.

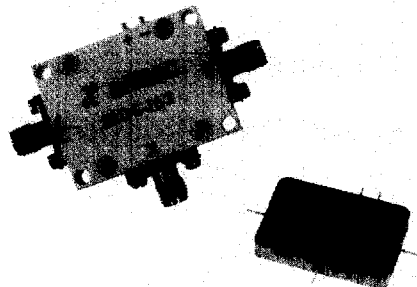
†Independent of sum frequency match.

This product contains elements protected by United States Patent Number 4,224,572.

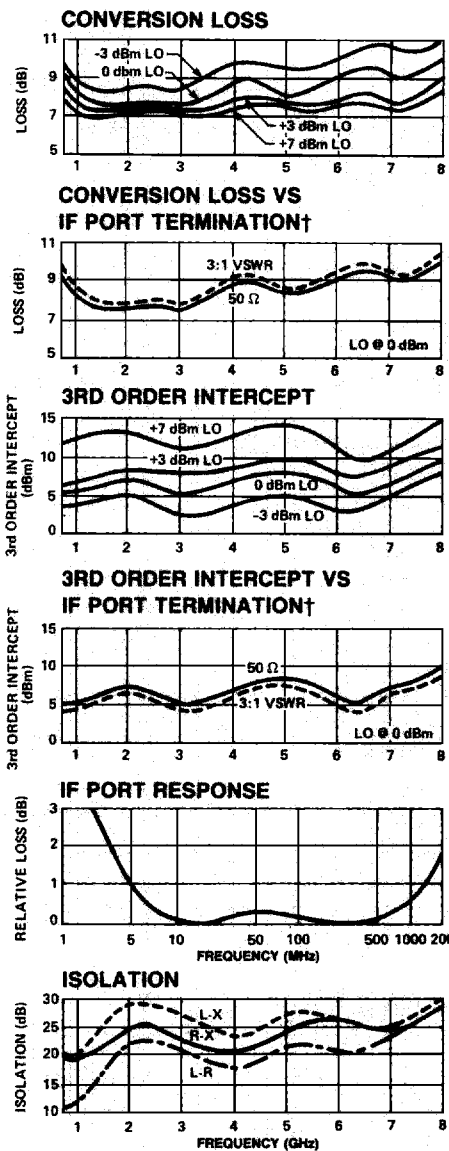
Ordering Information

| Model No. | Part No. | Connectors | Unit Price (5-9 Units) |
|-----------|----------|------------|------------------------|
| MD-163 | 9159 | Pin | \$428 |
| MDC-163 | 9154 | SMA | 515 |

Delivery is from stock.



Typical Performance



ANZAC

Make the Connection...

Adams Russell

80 Cambridge Street, Burlington, MA 01803 Fax (617) 273-1921

COMPONENTS GROUP

For Technical Information, Call (617) 273-3333

For Ordering Information, Call (617) 273-3333