



**MODELS**  
**MD-/MDC-162**

**TERMINATION-INSENSITIVE**  
**MIXER 1-7 GHz**

Intermodulation Ratio Insensitive to IF  
Port Mismatches  
6 dB Typical Midband Conversion Loss

### Guaranteed Specifications\*

(From -55°C to +85°C)

<b>Frequency Range</b>	RF, LO Ports	1-7 GHz	
	IF Port	10-2000 MHz	
<b>Conversion Loss**</b>	1.5-5.5 GHz	7.5 dB Max	
	1-7 GHz	8.5 dB Max	
<b>Isolation</b>	LO to RF	(1-3 GHz)	15 dB Min
		(3-7 GHz)	17 dB Min
	LO to IF	(1-3 GHz)	20 dB Min
		(3-7 GHz)	13 dB Min
	RF to IF	(1-3 GHz)	17 dB Min
		(3-7 GHz)	12 dB Min

### Operating Characteristics

<b>Impedance</b>	50 Ohms Nominal
<b>Maximum Input</b>	
Total Power	350mW Max @ 25°C Derated 3.5 mW/°C
LO Power	+24 dBm Max
<b>RF Input</b>	
1 dB Compression	+8 dBm Typical
1 dB Desensitization	+6 dBm Typical
<b>SSB Noise Figure</b>	Within 1 dB of Conversion Loss Max
<b>3rd Order Input Intercept</b>	
2.0 GHz	+16.5 dBm Typical
7.0 GHz	+18.0 dBm Typical
<b>3rd Order Intercept Degradation</b>	1.5 dB Typical @ IF Termination VSWR 3:1
<b>Package Type</b>	MD-162 Flatback (FP-18) 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. Case ground.

\* All specifications apply when operated at +13 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.

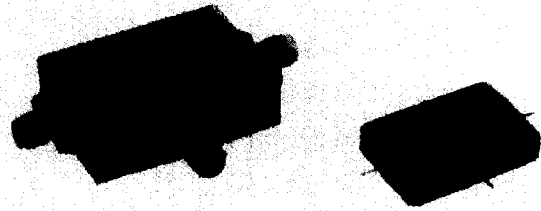
† Independent of sum frequency match.

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

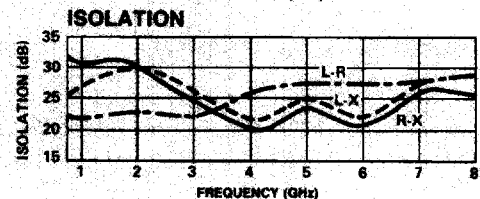
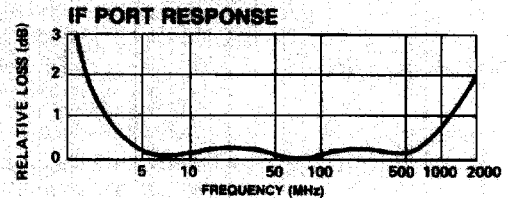
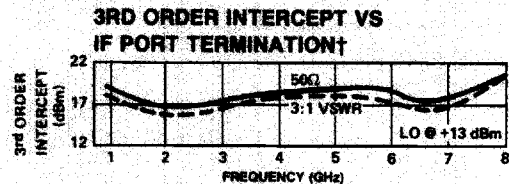
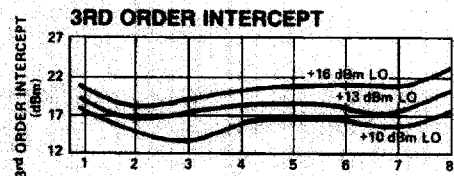
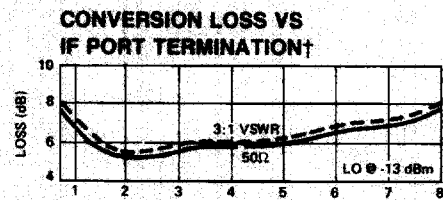
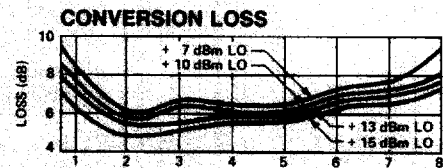
### Ordering Information

Model No.	Part No.	Connectors	Unit Price (5-9 Units)
MD-162	9149	Pin	\$341
MDC-162	9144	SMA	428

Delivery is from stock.



### Typical Performance



**ANZAC**

**Make the Connection...**

**Adams Russell**  
COMPONENTS GROUP

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

For Technical Information, Call (617) 273-3333

For Ordering Information, Call (617) 273-3333