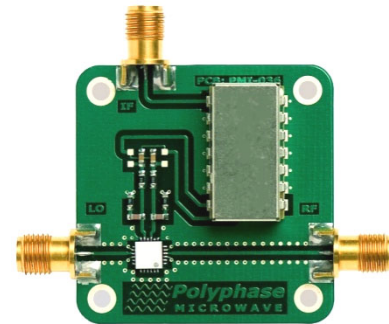


**FEATURES**

LO/RF Frequency:	3.5 – 7.0 GHz
Image Rejection:	36 dB
LO-RF Isolation:	50 dB
Input IP3:	+23 dBm
Input P1dB:	+12 dBm
Size:	1.5" X 1.5" [3.8 cm X 3.8 cm]

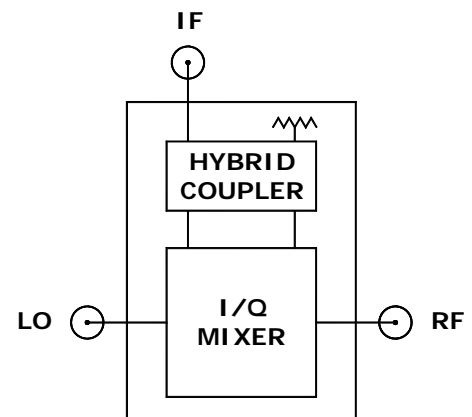

**DESCRIPTION**

The IRM3570N image-reject mixer is ideal for high performance microwave downconverters and receivers. The desired RF sideband is downconverted to the IF while the unwanted RF image is internally rejected.

The IRM3570N is available as a miniature caseless PCB with SMA female connectors. In-stock IF bands include:

- 10 MHz to 50 MHz
- 30 MHz to 90 MHz

Other common IF bands are available. Please specify  $IF=RF-LO$  or  $IF=LO-RF$  and IF band when ordering.

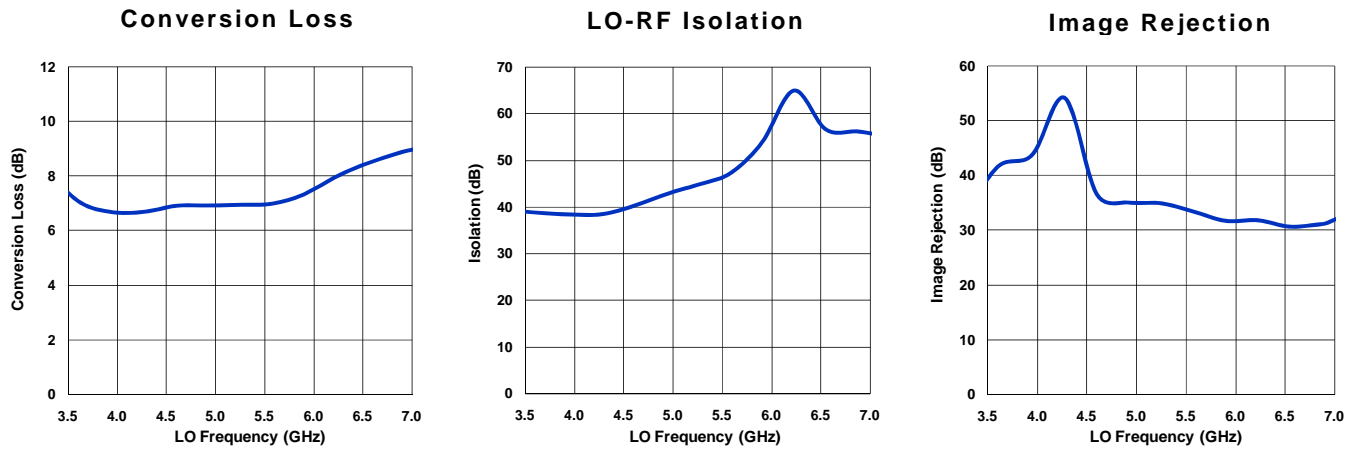

**ELECTRICAL SPECIFICATIONS**

Test Conditions: +25°C, LO Input = +15 dBm, RF input = 0 dBm @ LO+30 MHz unless otherwise noted.

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
LO Frequency Range		3.5		7.0	GHz
LO Power		+14	+15	+17	dBm
LO VSWR			1.4:1		Ratio
RF VSWR			2.0:1		Ratio
IF Output Impedance			50		$\Omega$
Conversion Loss			8	9.5	dB
Noise Figure			8.5	10	dB
Input IP3	2-Tone, $\Delta f = 1$ MHz		+23		dBm
Input P1dB			+12		dBm
LO-RF Isolation	No RF input	35	50		dB
LO-IF Isolation	No RF input		55		dB
Image Rejection	Over IF Frequency Band	26	36		dB
Operating Temperature Range		-40		+85	$^{\circ}\text{C}$
LO/RF Input Power w/o Damage				+20	dBm

**TYPICAL PERFORMANCE CHARACTERISTICS**

Standard Test Conditions: +25°C, LO Input = +15 dBm, RF Input = 0 dBm @ LO+30 MHz.



**DIMENSION DRAWING**

