

REMEC

Image Reject Mixer / SSB Modulator

Communications Band, Miniature Microstrip Carrier

RF 5.6-9.0 GHz

LO 5.6-9.0 GHz

IF 50-90 MHz

Electrical Specifications (1):

Parameter	Conditions			Specifications		
	RF(MHz)	LO(MHz)	IF(MHz)	Min	Typical	Max
SSB Conversion loss:(2) (3)	5.6-9.0	5.6-9.0	50-90		5.0 dB	6.0 dB
Image Rejection Sideband Suppression:(4)	5.8-8.8	5.8-8.8	70	17 dB	26 dB	
	5.6-9.0	5.6-9.0	50-90	16 dB	23 dB	
Isolation						
		5.6-9.0		25 dB	31 dB	
		5.6-9.0		25 dB	40 dB	
	5.6-9.0		50-90		26 dB	
Input 1-dB Compression Point:					40 dB	
					26 dB	
					40 dB	
	5.6-9.0	5.6-9.0	50-90		+5 dBm	MIQ54
Input Third Order Intercept Point:					+8 dBm	MIQ56
					+12 dBm	MIQ57
	5.6-9.0	5.6-9.0	50-90		+14 dBm	MIQ54
					+17 dBm	MIQ56
LO Power: (5)					+21 dBm	MIQ57
					+10 dBm	MIQ54
					+13 dBm	MIQ56
	5.6-9.0	5.6-9.0	50-90		+17 dBm	MIQ57

IRM5xMS-1

LO Power

4 = +10 dBm

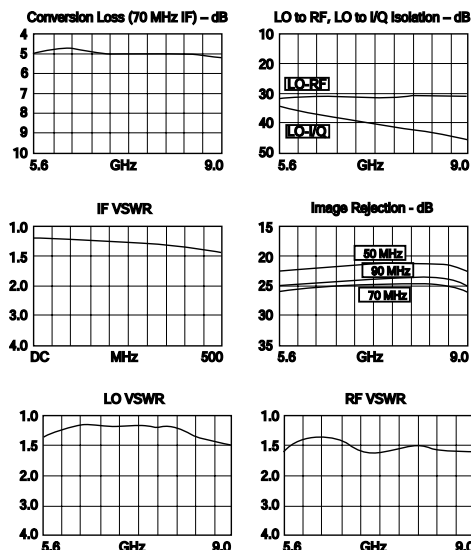
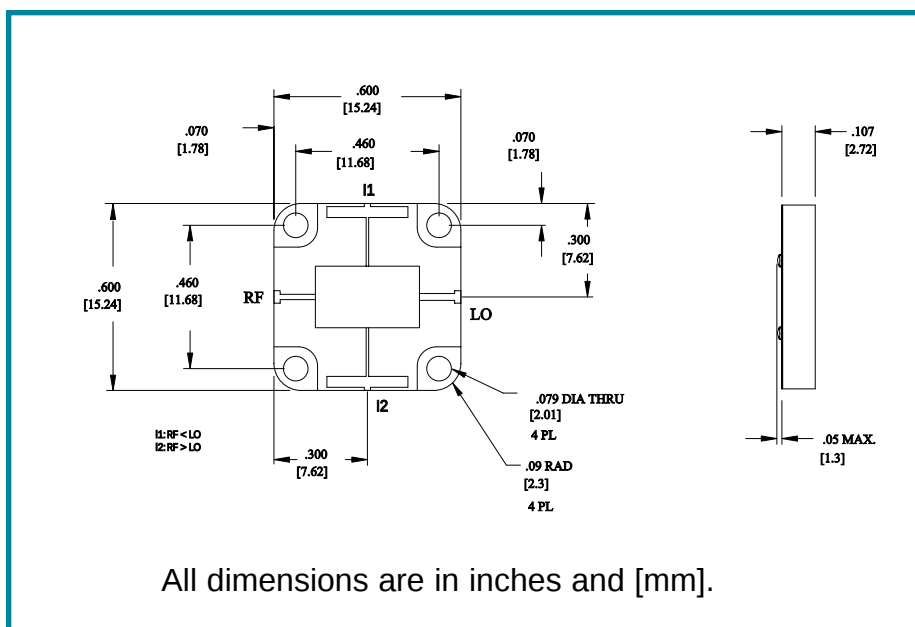
6 = +13 dBm

7 = +17 dBm

Notes:

- Specifications are guaranteed when tested as a downconverter in a 50 Ohm system at +25°C with the nominal LO power. Specifications indicated as typical are not guaranteed.
- Noise figure is typically within ±0.5 dB of conversion loss.
- Conversion loss typically degrades less than 0.5 dB at +100°C and improves less than 0.5 dB at -55°C.
- Measured with an IF quadrature hybrid whose amplitude and phase errors are 0.5 dB and 3 degrees maximum.
- Usable LO drives are up to 2 dB below to 3 dB above nominal.
- See Application notes M112, for aid in selecting the outline and for mounting and installation information.

Typical Performance at 25°C



Specifications subject to change without notice.

1590 Buckeye Drive - Milpitas, CA 95035 - TEL: 408-432-9898 - FAX: 408-432-1551 sales@remec.com - www.remec.com