

REMEC

Double Balanced Mixer Communications Band

RF 3.5-15.0 GHz
LO 3.5-15.0 GHz
IF DC-4000 MHz

Electrical Specifications ⁽¹⁾:

Parameter	Conditions			Specifications		
	RF(GHz)	LO(GHz)	IF(MHz)	Min	Typical	Max
SSB Conversion loss: ^{(2) (3)}	3.7-14.5	3.7-14.5	DC-500		5.0 dB	7.0 dB
	3.7-14.5	3.7-14.5	DC-2000		5.5 dB	8.5 dB
	3.5-15.0	3.5-15.0	DC-4000		7.5 dB	9.5 dB
Isolation LO to RF: LO to IF: RF to IF: IF to RF:	3.5-15.0	3.5-15.0	DC-2000 DC-4000	26 dB	35 dB	
		3.5-15.0		21 dB	30 dB	
					23 dB	+20 dBm +14 dBm
Input 1-dB Compression Point:	3.5-15.0	3.5-15.0	DC-4000		+1 dBm +4 dBm +8 dBm +12 dBm	MC53 MC54 MC56 MC57
Input Third Order Intercept Point:	3.5-15.0	3.5-15.0	DC-4000		+11 dBm +14 dBm +18 dBm +22 dBm	MC53 MC54 MC56 MC57
LO Power: ⁽⁴⁾	3.5-15.0	3.5-15.0	DC-4000		+7 dBm +10 dBm +13 dBm +18 dBm	MC53 MC54 MC56 MC57

MC5xSMx-7
MC5xSMx-14

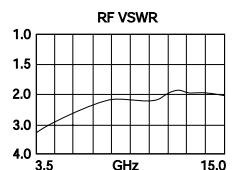
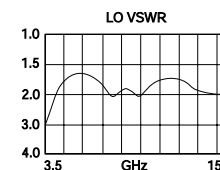
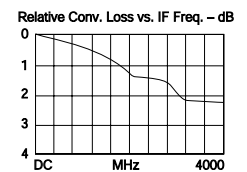
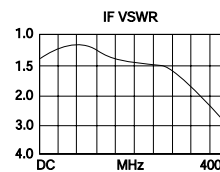
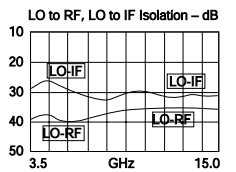
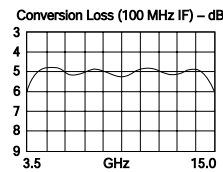
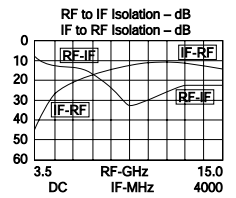
LO Power
3 = +7 dBm
4 = +10 dBm
6 = +13 dBm
7 = +18 dBm

D = No Cover
H = With Cover

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.
- Usable LO drives are up to 2 dB below and 3 dB above nominal.
- See Application note M112, for aid in selecting the outline and for mounting and installation information.

Typical Performance at 25°C



MC5xSMD-7

Outline: SMMC4A: AS SHOWN
SMMC4B: RF & LO REVERSED

MC5xSMH-7

Outline: SMMT4A: AS SHOWN
SMMT4B: RF & LO REVERSED

NOTE: See PC board footprint - FP1 on page 3-61
All dimensions are in inches and [mm].

Specifications subject to change without notice.