

Double Balanced Downconverter

Model MC2xMS-1

Communications Band

RF 3.6 to 4.3 GHz

Electrical Specifications:⁽¹⁾

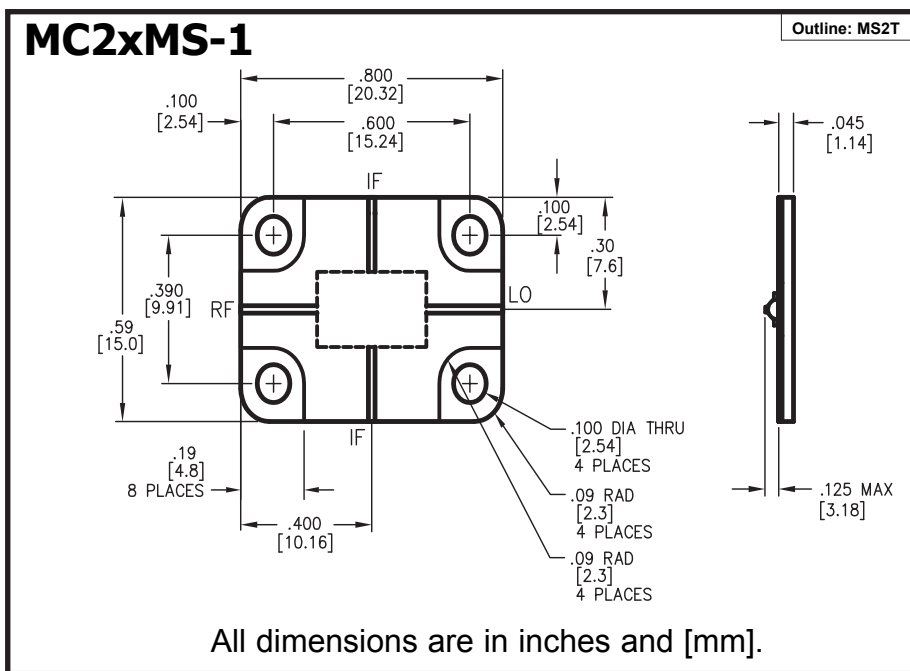
Parameter	Conditions			Specifications		
	RF (GHz)	LO (GHz)	IF (MHz)	Min	Typical	Max
SSB Conversion loss: ^{(2) (3)}	3.6-4.3	4.7-5.4	400-1500		5.5 dB	7.0 dB
Isolation LO to RF:		4.7-5.4			35 dB	
Isolation LO to IF:		4.7-5.4			30 dB	
Isolation RF to IF:	3.6-4.3				23 dB	
Input 1-dB Compression Point:	3.6-4.3	4.7-5.4	400-1500		+1 dBm +4 dBm +8 dBm	MC23MS-1 MC24MS-1 MC25MS-1
Input Third Order Intercept Point:	3.6-4.3	3.5-5.4	400-1500		+11 dBm +14 dBm +18 dBm	MC23MS-1 MC24MS-1 MC25MS-1
LO Power: ⁽⁴⁾	3.6-4.3	3.5-5.4	400-1500		+7 dBm +10 dBm +13 dBm	MC23MS-1 MC24MS-1 MC25MS-1

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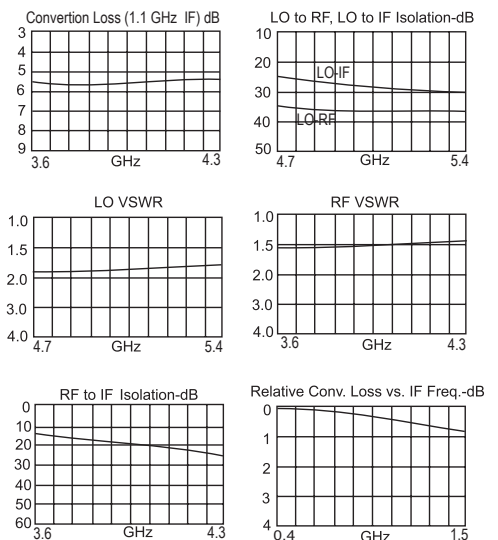
LO Power ←
3 = +7 dBm
4 = +10 dBm
5 = +13 dBm

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 if IF frequencies greater than 10 MHz.
- Conversion loss typically degrades less than 0.5 dB at +100 C and improves less than 0.5 dB at -5 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



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