Triple Balanced Mixer

Ultra-Broadband

Model MM9xMS-6
Model MM9xMS-15

RF 2.0 to 19.0 GHz

Electrical Specifications:[1]

Parameter	Conditions RF (GHz)	LO (GHz)	IF (GHz)	Specifications Min	Typical	Max
SSB Conversion loss:[2][3]	3.0-19.0	3.0-19.0	2.0-7.0		6.5 dB	9.0 dB
	2.0-19.0	2.0-19.0	1.0-9.0		8.0 dB	11.0 dB
Isolation						
LO to RF:		2.0-4.0		18 dB	23 dB	
		4.0-19.0		20 dB	31 dB	
LO to IF:		2.0-4.0		15 dB	21 dB	
		4.0-19.0		19 dB	23 dB	
RF to IF:	2.0-19.0				27 dB	
IF to RF:			1.0-9.0		27 dB	
Input 1-dB Compression Point:	2.0-19.0	2.0-19.0	1.0-9.0		+5 dBm	MM94
					+8 dBm	MM96
					+12 dBm	MM97
					+15 dBm	MM98
Input Third Order Intercept Point:	2.0-19.0	2.0-19.0	1.0-9.0		+14 dBm	MM94
					+17 dBm	MM96
					+21 dBm	MM97
					+24 dBm	MM98
LO Power:[4]	2.0-19.0	2.0-19.0	1.0-9.0		+10 dBm	MM94
					+13 dBm	MM96
					+17 dBm	MM97
					+21 dBm	MM98

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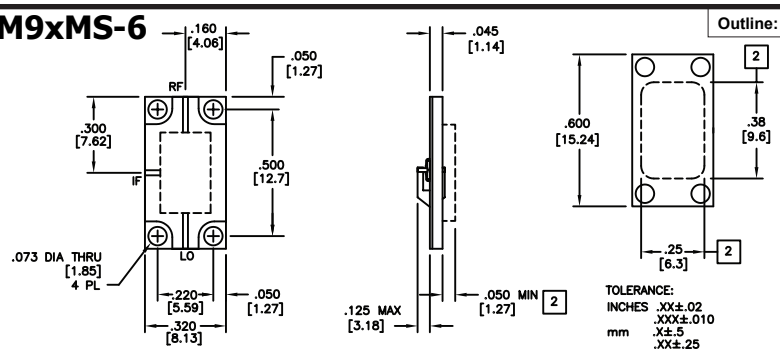
LO Power
4 = +10 dBm
6 = +13 dBm
7 = +17 dBm
8 = +21 dBm

Notes:
1. 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.
2. Noise figure is typically within ±0.5 dB of conversion loss.
3. Conversion loss typically degrades less than 0.5 dB at +100˚C and improves less than 0.5 dB at -55˚C.
4. Usable LO drives are up to 2 dB below and 3 dB above nominal.

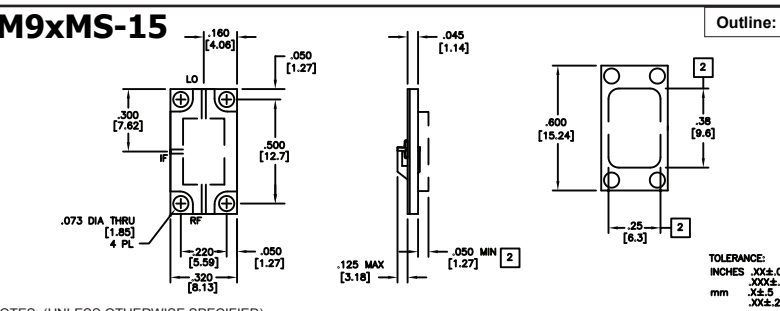
MM9xMS-6

Outline: MS3AL



MM9xMS-15

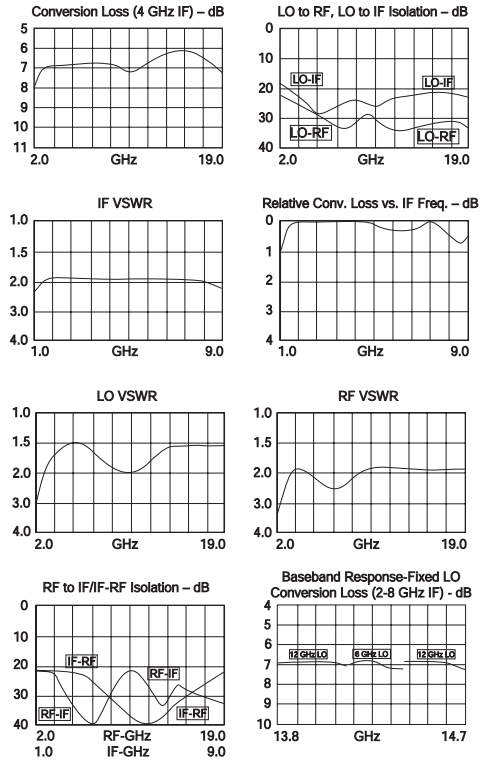
Outline: MS3BL



NOTES: (UNLESS OTHERWISE SPECIFIED)
1. LO, RF, AND IF TRACES ARE .02 [.05] WIDE PLATED COPPER SUITABLE FOR SOLDER ATTACH.
2 RELIEF ON MOUNTING SURFACE REQUIRED FOR COMPONENT CLEARANCE.

All dimensions are in inches and [mm].

Typical Performance at 25˚C



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