

Magnum Microwave

Double-Balanced Mixer

Ultra-Broadband, Miniature Surface Mount

RF 1.8–18.0 GHz
 LO 1.8–18.0 GHz
 IF DC–800 MHz

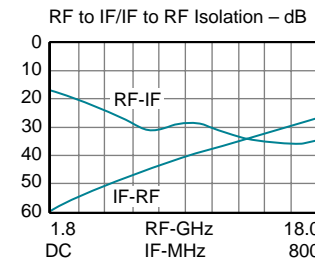
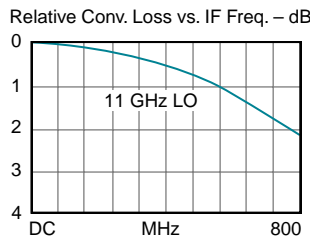
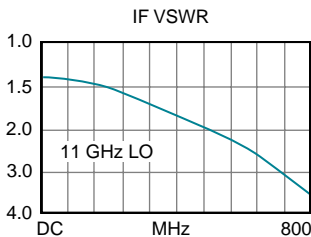
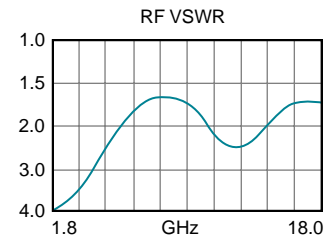
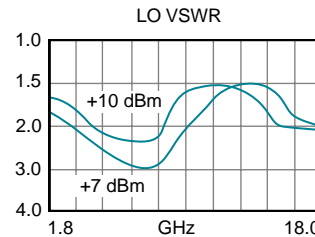
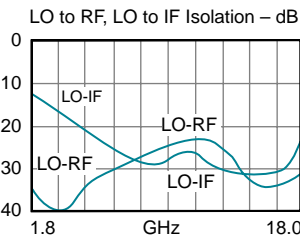
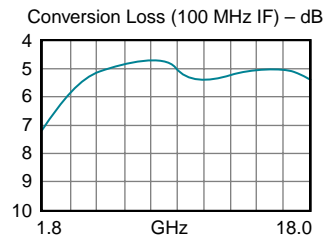
Electrical Specifications⁽¹⁾:

Parameter	Conditions			Specifications		
	RF (GHz)	LO (GHz)	IF (MHz)	Min.	Typ.	Max. (Model)
SSB Conversion Loss: ⁽²⁾⁽³⁾	3.0–19.0	3.0–19.0	DC–400		5.5 dB	7.5 dB
	1.8–18.0	1.8–18.0	DC–400		5.8 dB	8.5 dB
	1.8–18.0	1.8–18.0	DC–800		7.2 dB	10.5 dB
Isolations	LO to RF: LO to IF:	1.8–18.0		20 dB	28 dB	
		4.0–19.0		15 dB	23 dB	
	RF to IF: IF to RF:	1.8–18.0			28 dB	
			DC–800		40 dB	
Input 1-dB Compression Point:	1.8–18.0	1.8–18.0	DC–800		+ 2 dBm + 5 dBm + 8 dBm + 12 dBm	(MM93) (MM94) (MM96) (MM97)
Input Third Order Intercept Point:	1.8–18.0	1.8–18.0	DC–800		+ 11 dBm + 14 dBm + 18 dBm + 21 dBm	(MM93) (MM94) (MM96) (MM97)
LO Power: ⁽⁴⁾	1.8–18.0	1.8–18.0	DC–800		+ 7 dBm + 10 dBm + 14 dBm + 18 dBm	(MM93) (MM94) (MM96) (MM97)

Notes:

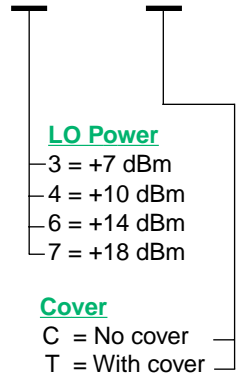
- Specifications are guaranteed when tested as a downconverter in a 50 Ohm system at +25°C with the nominal LO power. Specifications indicated as typical are not guaranteed.
- Noise figure is typically within ±0.5 dB of conversion loss for IF frequencies greater than 10 MHz.
- Conversion loss typically degrades less than 0.5 dB at +100°C and improves less than 0.5 dB at -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



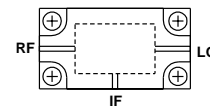
MM9XSMX-1

MM9XSMX-15

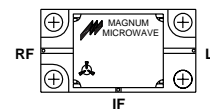


Outline (-1)⁽⁵⁾

C: SMMC3C

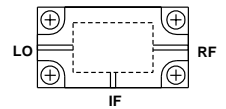


T: SMMT3C

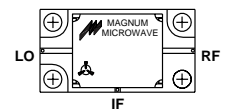


Outline (-15)⁽⁵⁾

C: SMMC3D



T: SMMT3D



Specifications subject to change without notice

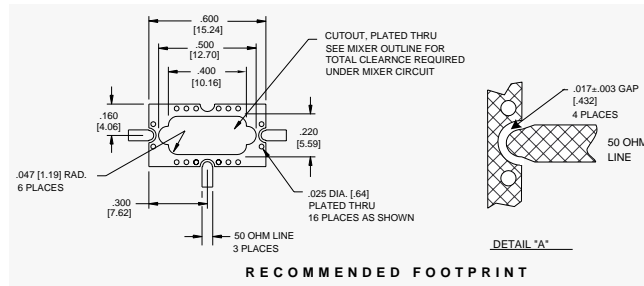
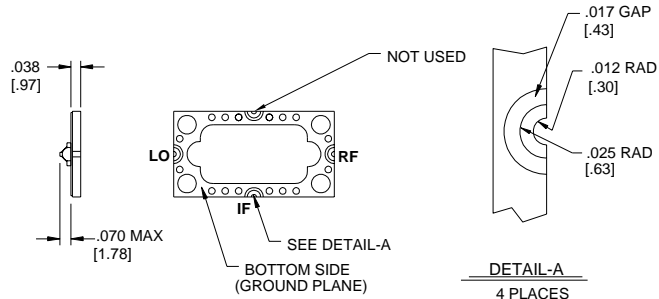
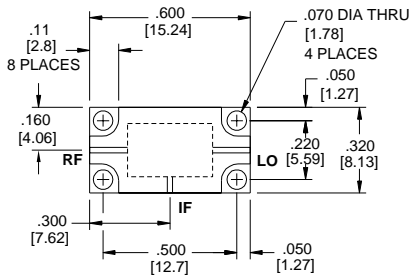
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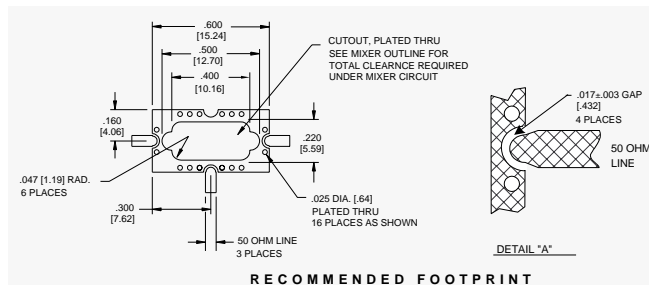
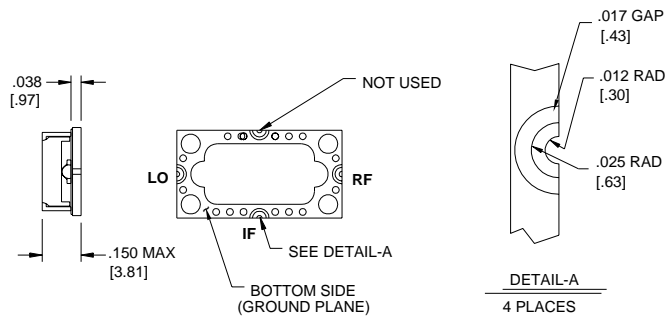
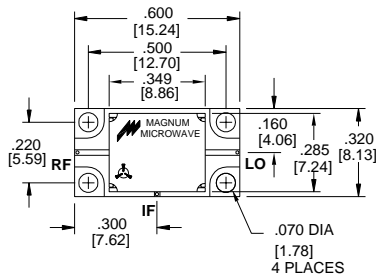
RF 1.8-18.0 GHz
LO 1.8-18.0 GHz
IF DC-800 MHz

Outline (-1)⁽⁵⁾
C: SMMC3C

MM9XSMX-1 MM9XSMX-15



T: SMMT3C



Specifications subject to change without notice

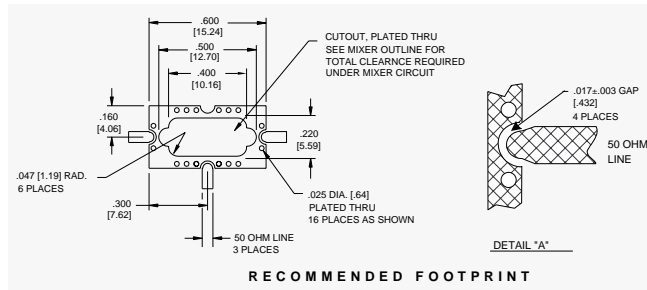
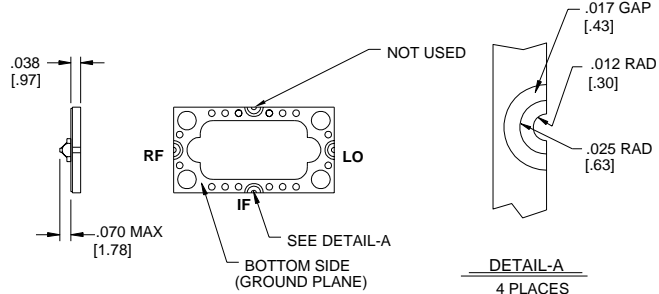
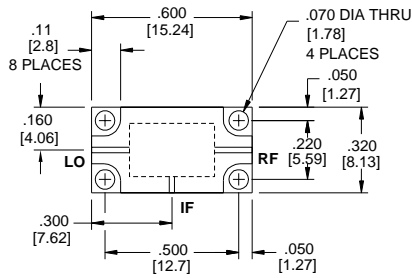
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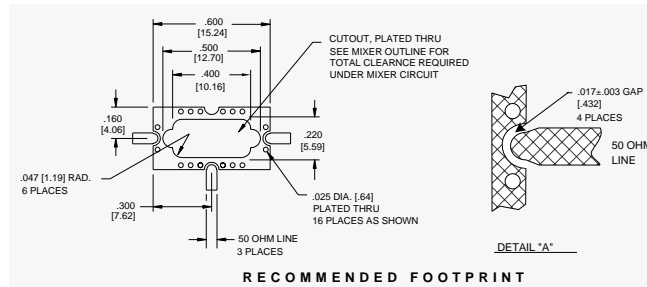
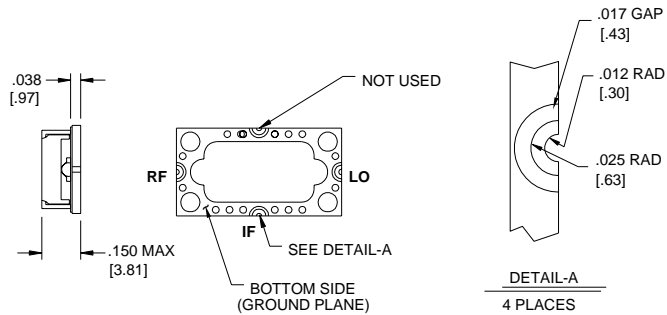
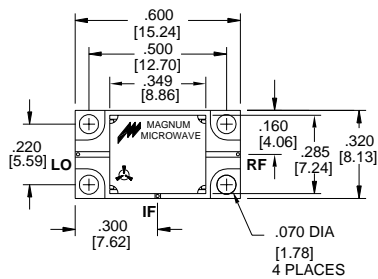
RF 1.8-18.0 GHz
LO 1.8-18.0 GHz
IF DC-800 MHz

MM9XSMX-1 MM9XSMX-15

Outline (-15)⁽⁵⁾
C: SMMC3D



T: SMMT3D



Specifications subject to change without notice

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