Double Balanced Mixer

Model MC134MS-3 Model MC134MS-14

Communications Band

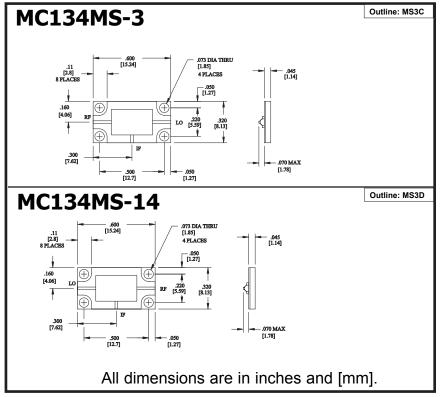
RF 17.0 to 24.0 GHz

Electrical Specifications (1):

	Conditions			Specifications		
Parameter	RF (GHz)	LO (GHz)	IF (MHz)	Min	Typical	Max
SSB Conversion	17.0-24.0	15.0-26.0	DC-2000		7.5 dB	9.5 dB
loss:(2)(3)	17.0-24.0	15.0-26.0	DC-4000		8.5 dB	10.5 dB
Isolation						
LO to RF:		15.0-26.0			38 dB	
LO to IF:		15.0-26.0			30 dB	
RF to IF:	17.0-24.0				40 dB	
Input 1 dB	17.0-24.0	15.0-26.0	DC-4000		+3 dBm	
Compression Point:						
Input Third Order	17.0-24.0	15.0-26.0	DC-4000		+13 dBm	
Intercept Point:						
LO Power: (4)	17.0-24.0	15.0-26.0	DC-4000		+10 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.
- 2. Noise figure is typically within ±0.5 dB of conversion loss for IF frequencies greater than 10 MHz.
- 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
- 5. See Application note M112, for aid in selecting the outline and for mounting and installation information.



Typical IF to RF Isolation - dB **Performance** 20 at 25°C 30 40 17.0 RF-GHz Conversion Loss (1.0 GHz IF) - dB LO to RF, LO to IF Isolation - dB 10 40 50 GHz 26.0 LO-IF IF VSWR Relative Conv. Loss vs. IF Freg. - dB 2 2.0 3.0 4.0 LDC LO VSWR RF VSWR 1.0 1.0 1.5 1.5 2.0 2.0 3.0 4.0 17.0

