

# I/Q MIXER/MODULATOR

Available as: MIQ24MS-6, .850" x 1.05"  
Microstrip Carrier

## MODEL MIQ24MS-6

### Features

- Conversion Loss: 6.0 dB Typical
- LO to IF Isolation: 32 dB Typical
- Operating Temperature Range: -55°C to +100°C

**RF: 3 to 4 GHz**  
**LO: 3 to 4 GHz**  
**IF: DC to 62 MHz**

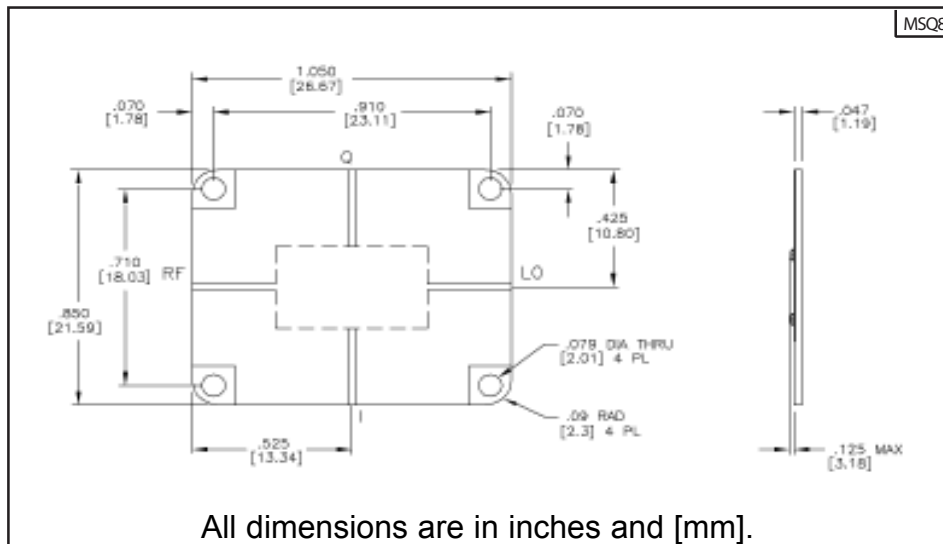
### Electrical Specifications:<sup>(1)</sup>

Parameter	Conditions			Specifications		
	RF (GHz)	LO (GHz)	IF (MHz)	Min	Typical	Max
SSB Conversion loss:	3.0 - 4.0	3.0 - 4.0	DC - 62	—	6.0 dB	8.0 dB
Isolations	—	3.0 - 4.0	—	30 dB	35 dB	—
Sideband Suppression:	3.0 - 4.0	3.0 - 4.0	DC - 62	22 dB	25 dB	—
LO Power Input:	3.0 - 4.0	3.0 - 4.0	DC - 62	+8.0 dBm	10.0 dBm	+11 dBm

### Notes:

1. Specifications are guaranteed when tested as a downconverter in a 50 Ohm system at +25°C with an LO power of +10 dBm.
2. Noise figure is typically within  $\pm 0.5$  dB of the SSB Conversion loss for IF frequencies greater than 10 MHz.

### Case Outline



Microstrip Traces: LO, RF, and IF traces are 0.02 in (0.51 mm) wide tin plated copper on Duroid, suitable for solder attach.

### Typical Performance Data

