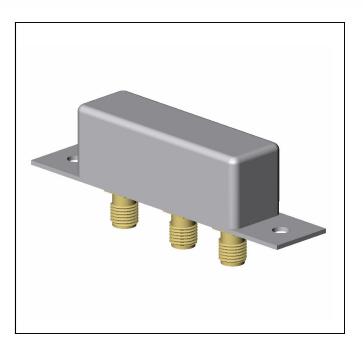




Double-Balanced Mixer

Features

- LO and RF: 1.8 to 6.2 GHz
- IF: DC to 2 GHZ
- LO Drive +7 dBm (nominal)
- High Isolation 35 dB (Typ.)



Guaranteed Specifications¹

Characteristics	Min	Тур.	Max.	Test Conditions
SSB Conversion Loss And		7.0 dB	8.5 dB	fL & fR 1.8 to 4.2 GHz fl 0.01 to 1 GHz
SSB Noise Figure		8.5 dB	9.5 dB	fL & fR 1.8 to 4.2 GHz fl 0.01 to 2 GHz
		9.0 dB	10.0 dB	fL & fR 1.8 to 6.2 GHz fl 0.01 to 2 GHz
Isolation fL at R	25 dB	40 dB		fL 1.8 to 4.2 GHz
fL at I	15 dB	25 dB		
fL at R fL at I	18 dB 15 dB	25 dB 20 dB		fL 4.2 to 6.2 GHz
Conversion Compression		1.0 dB		fR = 0 dBm fL at +7 dB,

1. Measure in a 50-Ohm system with nominal LO drive and downconverter application only, unless otherwise specified. The I-Port frequency range extends to DC for phase detection, pulse modulation, or attenuator applications, I-Port VSWR degrades from a 50-Ohm system at low IF frequencies.

Absolute Maximum Ratings

Storage Temperature	-65°C to +100°C		
Operating Temperature	-54°C to +100°C		
Peak RF Input Power	+17 dBm		
Peak Input Current at 25°C	50 mA DC		

Weight 31 gram (1.1 oz) max.

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information.

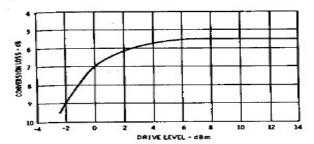
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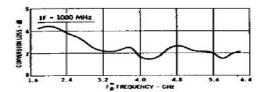
V2

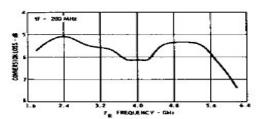
Typical Performance Curves at 25°C

Conversion Loss



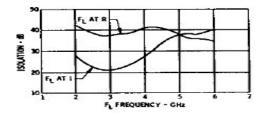
Conversion Loss vs. Drive Level: Conversion loss in an SSB system is a function of drive level (f with f and f at approximately 3 GHz and f level at -6 dBm.





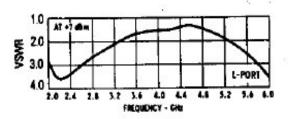
Conversion Loss vs. Input Frequency: The frequency ordinate refers to the report (f_R) with f_I at 200 MHz and 1000 MHz, data plotted with f_L at +7

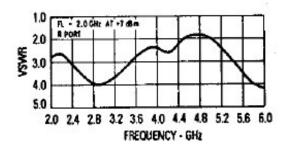
Isolation

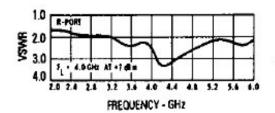


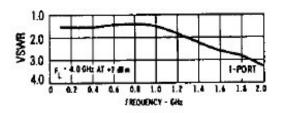
Isolation vs. Frequency: Level of the f signal fed through to the R- and I-ports with respect to the level of the f signal at the L-port.

VSWR









VSWR vs. Frequency: VSWR of the L-I- and R-ports in a 50-ohm system. Some variation in the R-port VSWR will occur as a function of the L-port frequency as shown above. Curves for Rport VSWR are plotted for L-port frequencies of 2 GHz and 4 GHz. A plot of I-port VSWR is also shown with f at 4 GHz.

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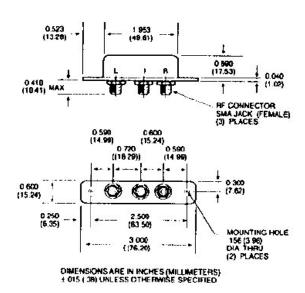




Double-Balanced Mixer

M1H V2

Outline Drawing: M1H



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