MY88H / MY88HC

Triple-Balanced Mixer

Rev. V3

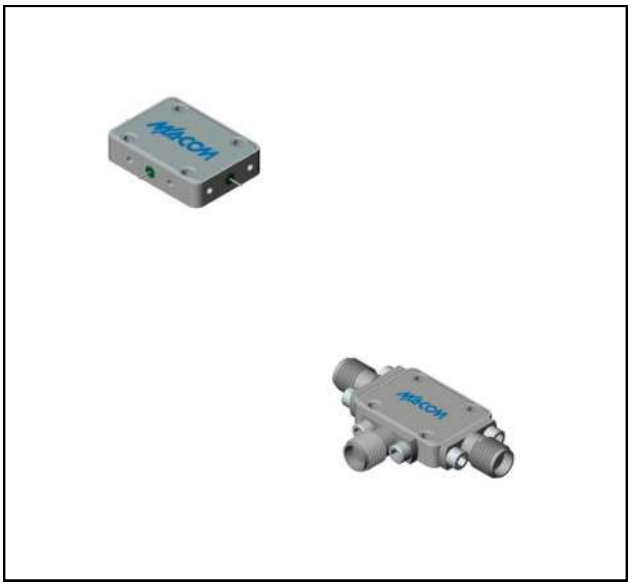
Features

- LO 2 TO 18 GHz
- RF 2 TO 18 GHz
- IF 2 TO 8 GHz
- LO DRIVE +21 dBm (nominal)
- WIDE BANDWIDTH
- HIGH THIRD-ORDER I.P. +24 dBm (TYP.)

Description

MY88H is a triple balanced mixer, designed for use in military, commercial and test equipment applications. The design utilizes Schottky ring quad diodes and broadband soft dielectric baluns to attain excellent performance. The use of high temperature solder assembly processes used internally makes it ideal for use in manual, semi-automated assembly. Environmental screening available to MIL-STD-883, MIL-STD-202 or MIL-DTL-28837, consult factory.

Product Image



Ordering Information

Part Number	Package
MY88H	Versapac
MY88HC	SMA Connectorized

Electrical Specifications: $Z_0 = 50\Omega$ Lo = +21 dBm (Downconverter Application only)

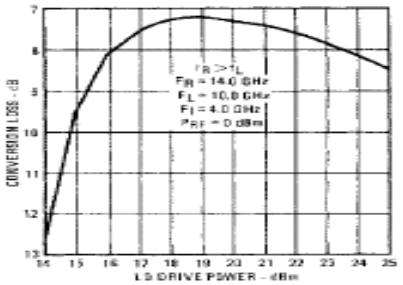
Parameter	Test Conditions	Units	Typical	Guaranteed	
				+25ºC	-54º to +85ºC
SSB Conversion Loss (max) & SSB Noise Figure (max)	fR = 2 to 10 GHz, fL = 2 to 18 GHz, fI = 2 to 8 GHz fR = 10 to 18 GHz, fL = 2 to 18 GHz, fI = 2 to 8 GHz	dB dB	7.5 8.0	10.0 10.5	10.3 10.8
Isolation, L to R (min)	fL = 2 to 18 GHz	dB	28	15	14
Isolation, L to I (min)	fL = 2 to 18 GHz	dB	32	17	16
1 dB Conversion Comp.	fL = +24 dBm	dBm	+17		
Input IP3	fR1 = 6 GHz at 0 dBm, fR2 = 6.01 GHz at 0 dBm, fL = 8 GHz at +21 dBm fR1 = 14 GHz at 0 dBm, fR2 = 14.01 GHz at 0 dBm, fL =10 GHz at +21 dBm	dBm dBm	+26 +24		

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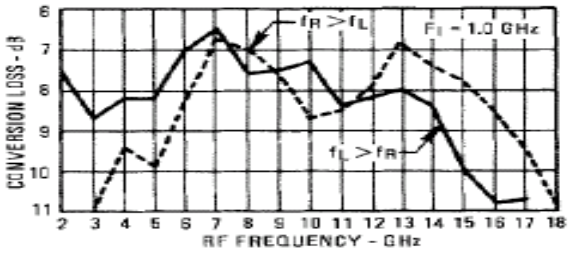
Typical Performance Curves

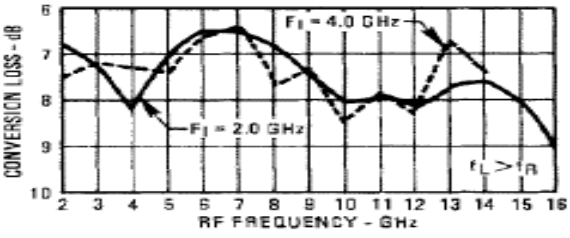
Conversion Loss vs Lo Drive Power

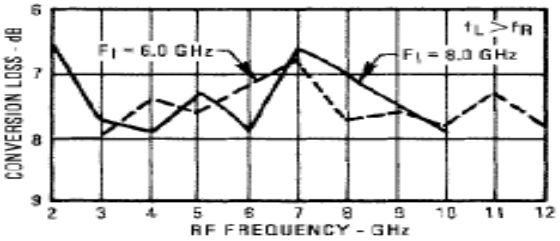


Drive Level: The maximum recommended drive level is +24 dBm.

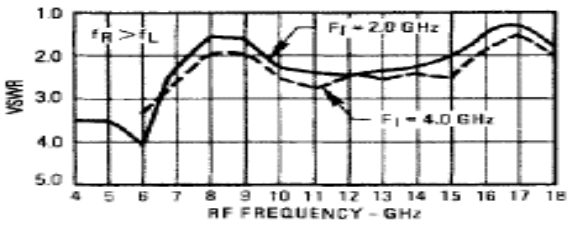
Conversion Loss vs Input Frequency
Lo @ + 21 dBm

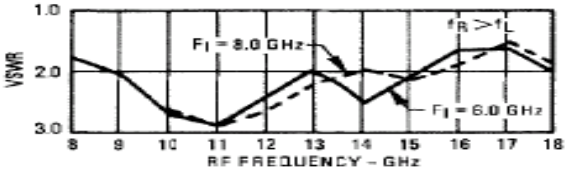


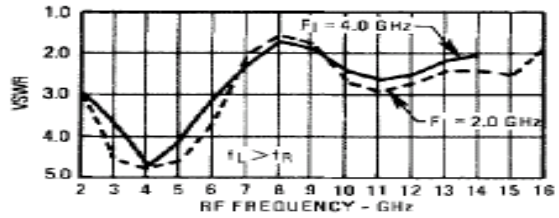


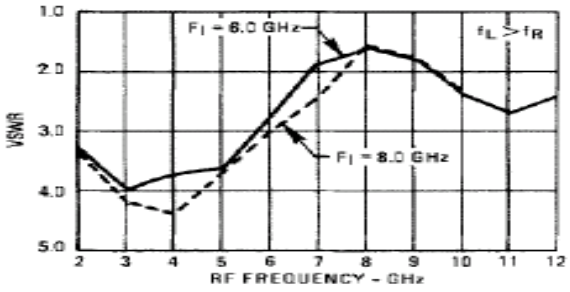


R-Port VSWR Lo @ + 21 dBm









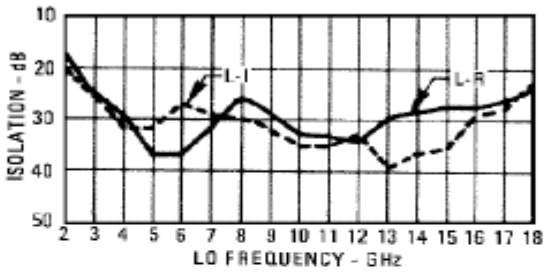
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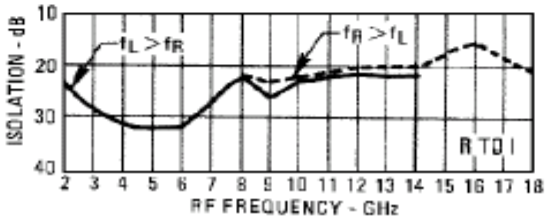
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Absolute Maximum Ratings

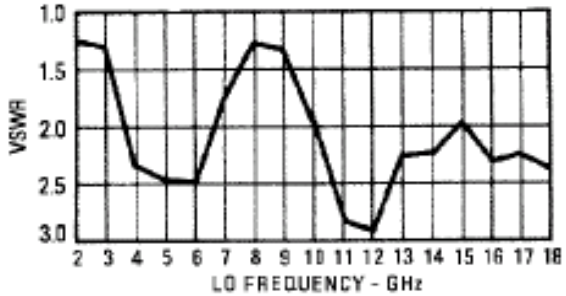
Parameter	Absolute Maximum
Operating Temperature	-54ºC to +100ºC
Storage Temperature	-65ºC to +100ºC
Peak Input Power	+27 dBm max @ +25ºC +24 dBm max @ +100ºC
Peak Input Current	100 mA DC

Isolation vs Frequency

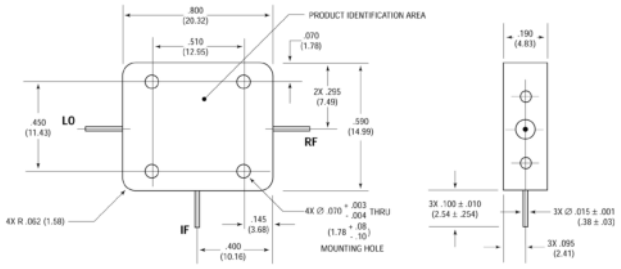




L-Port VSWR @ + 21 dBm

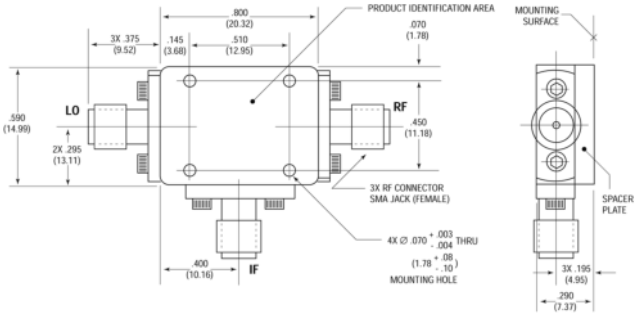


Outline Drawing: Versapac *



Weight: 6 grams (0.21 oz.) max

Outline Drawing: SMA Connectorized *



Weight: 12 grams (0.42 oz.) max

* Dimensions are inches (millimeters) ±0.015 (0.38) unless otherwise specified.

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