MY83H / MY83HC

Triple-Balanced Mixer

Rev. V2

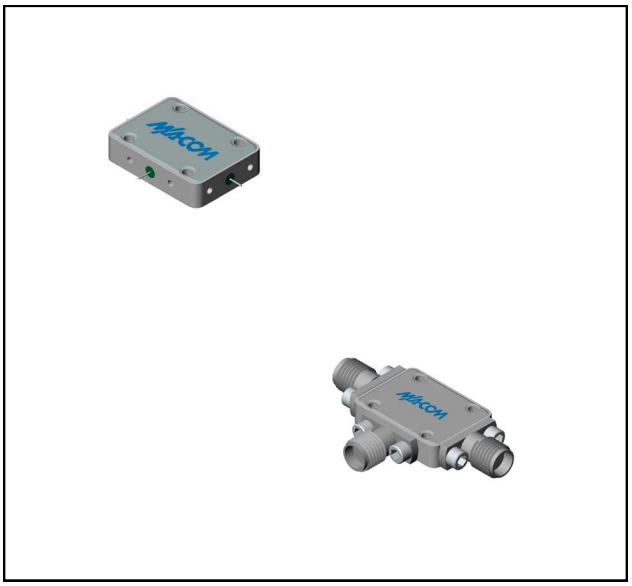
Features

- LO & RF 2.0 TO 18.0 GHz
- IF 0.03 TO 5.0 GHz
- LO DRIVE +20 dBm (NOMINAL)
- HIGH IP3 +24 dBm (TYP.)
- WIDE BANDWIDTH

Description

MY83H 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
MY83H	Versapac
MY83HC	SMA Connectorized

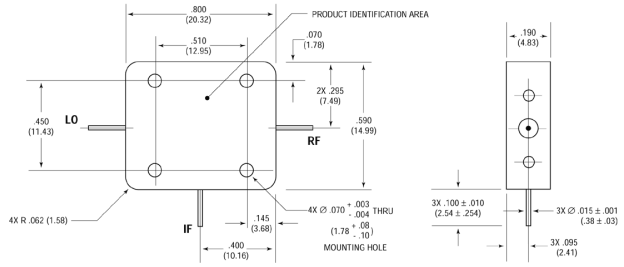
Electrical Specifications: $Z_0 = 50\Omega$ Lo = +20 dBm (Downconverter Application only)

Parameter	Test Conditions	Units	Typical	Guaranteed	
				+25°C	-54° to +85°C
SSB Conversion Loss (max) & SSB Noise Figure (max)	fR = 2 to 18 GHz, fL = 2 to 18 GHz, fI = 0.03 to 5 GHz	dB	8.5	11.0	1.3
Isolation, L to R (min)	fL = 2 to 3 GHz fL = 3 to 18 GHz	dB dB	16 25	12 16	11 15
Isolation, L to I (min)	fL = 2 to 18 GHz	dB	30	20	19
1 dB Conversion Comp.	fL = +20 dBm	dBm	+17		
Input IP3	fR1 = 6 GHz at 0 dBm, fR2 = 6.01 GHz at 0 dBm, fL = 8 GHz at +20 dBm fR1 = 14 GHz at 0 dBm, fR2 = 14.01 GHz at 0 dBm, fL =18 GHz at +20 dBm	dBm dBm	+26 +24		

Absolute Maximum Ratings

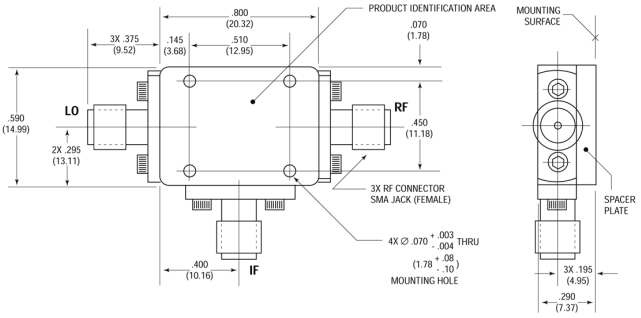
Parameter	Absolute Maximum
Operating Temperature	-54ºC to +100ºC
Storage Temperature	-65ºC to +100ºC
Peak Input Power	+27 dBm max @ +25ºC +21 dBm max @ +100ºC
Peak Input Current	100 mA DC

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.