



MY83H/MY83HC

V2

Triple-Balanced Mixer

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

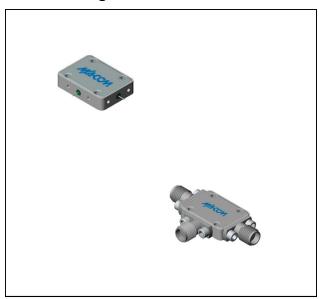
Description

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.

Ordering Information

Part Number	Package	
MY83H	Versapac	
MY83HC	SMA Connectorized	

Product Image



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

Parameter	Test Conditions	Units	Typical	Guaranteed	
Farameter	lest Conditions			+25°C	-54° to +85°C
SSB Conversion Loss (max) & SSB Noise Fig- ure (max)	fR = 2 to 18 GHz, fL = 2 to 18 GHz, fl = 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		

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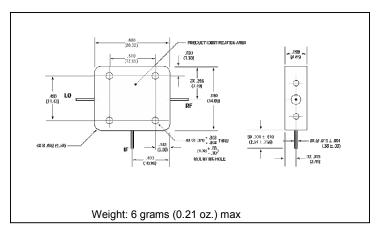
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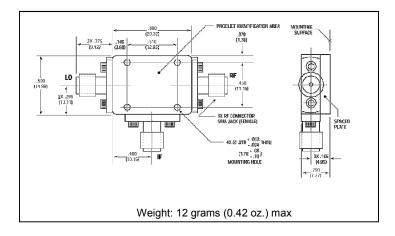
Absolute Maximum Ratings

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

Outline Drawing: Versapac *



Outline Drawing: SMA Connectorized *



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

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