M79H / M79HC



Double-Balanced Mixer

Rev. V3

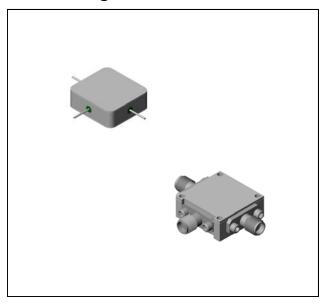
Features

- LO 5 TO 18 GHz
- RF 7 TO 18 GHz
- IF DC TO 3000 MHz
- LO DRIVE: +20 dBm (NOMINAL)
- HIGH THIRD-ORDER I.P. +24 dBm (TYP.)

Description

The M79H is a double balanced mixer, designed for use in military, commercial and test equipment applications. This mixer can also be used as a phase detector or bi-phase modulator since the IF port is DC coupled to the diodes. Environmental screening available to MIL-STD-202, and MIL-DTL-28837, consult factory.

Product Image



Ordering Information

Part Number	Package	
M79H	Minpac	
M79HC	SMA Connectorized	

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

Parameter	Test Conditions	Units	Typical	Guaranteed	
raiametei				+25°C	-54º to +85ºC
SSB Conversion Loss (max) & SSB Noise Figure (max)	$\begin{array}{l} fR=7\ to\ 15\ GHz, fL=6\ to\ 15\ GHz, fI=30\ to\ 1000\ MHz\\ fR=7\ to\ 16\ GHz, fL=5\ to\ 18\ GHz, fI=30\ to\ 2000\ MHz\\ fR=7\ to\ 16\ GHz, fL=5\ to\ 18\ GHz, fI=30\ to\ 3000\ MHz\\ fR=16\ to\ 18\ GHz, fL=5\ to\ 15\ GHz, fI=30\ to\ 3000\ MHz \end{array}$	dB dB dB dB	6.5 7.0 7.5 8.5	8.0 8.5 9.5 10.0	8.3 8.8 9.8 10.3
Isolation, L to R (min)	fL = 5 to 14 GHz fL = 14 to 18 GHz	dB dB	35 30	23 20	22 19
Isolation, L to I (min)	fL = 5 to 9 GHz fL = 9 to 18 GHz	dB dB	27 35	17 25	16 24
1 dB Conversion Comp.	fL = +20 dBm	dBm	+15		
Input IP3	fR1=13 GHz at 0 dBm,fR2=13.01GHz at 0 dBm, fL = 14 GHz at = 20 dBm	dBm	+24		

Commitment to produce in volume is not guaranteed.

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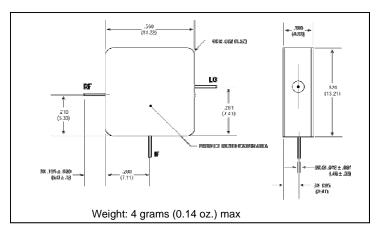
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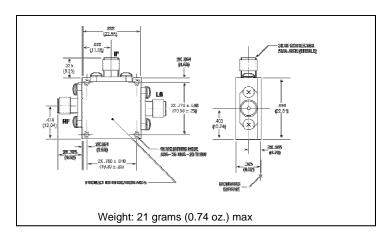
Absolute Maximum Ratings

Parameter	Absolute Maximum		
Operating Temperature	-54°C to +100°C		
Storage Temperature	-65°C to +100°C		
Peak Input Power	+25 dBm max @ +25°C +21 dBm max @ +85°C		
Peak Input Current	100 mA DC		

Outline Drawing: Minpac *



Outline Drawing: SMA Connectorized *



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

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