

### **Triple-Balanced Mixer**

Rev. V2

#### **Features**

- LO & RF 2 TO 18 GHz
- IF 0.03 TO 5 GHz
- LO DRIVE +13 dBm (NOMINAL)
- WIDE BANDWIDTH

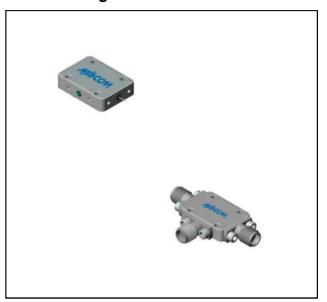
#### **Description**

MY82 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.



Part Number	Package	
MY82	Versapac	
MY82C	SMA Connectorized	

#### **Product Image**



## Electrical Specifications: $Z_0 = 50\Omega$ Lo = +13 dBm (Downconverter Application only)

Parameter	Took Conditions	Units	Typical	Guaranteed	
Parameter	Test 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, fI = 0.03 to 2 GHz fR = 2 to 18 GHz, fL = 2 to 18 GHz, fI = 2 to 5 GHz	dB dB	7.5 8.0	9.0 10.5	9.5 11.0
Isolation, L to R (min)	fL = 2 to 3 GHz fL = 3 to 18 GHz	dB dB	20 30	16 18	14 16
Isolation, L to I (min)	fL = 2 to 18 GHz	dB	30	20	18
1 dB Conversion Comp.	conversion Comp. fL = +13 dBm		+6		
Input IP3	fR1 = 6 GHz at -3 dBm, fR2 = 6.01 GHz at -3 dBm, fL = 8 GHz at +13 dBm fR1 = 15 GHz at -3 dBm, fR2 = 15.01 GHz at -3 dBm, fL =18 GHz at +13 dBm	dBm dBm	+18 +19		



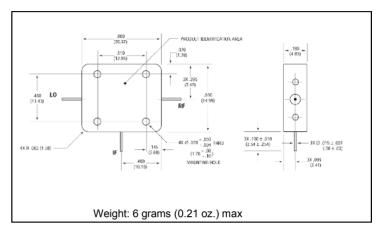
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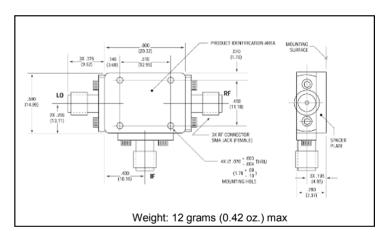
#### **Absolute Maximum Ratings**

Parameter	Absolute Maximum		
Operating Temperature	-54°C to +100°C		
Storage Temperature	-65°C to +100°C		
Peak Input Power	+26 dBm max @ +25°C +23 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.

# MY82 / MY82C



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