



HENGWEI MICROWAVE

# DOUBLE & TRIPLE -BALANCED MIXER

## HWM83/83C

- ◆ LO : 2 TO 18GHz
- ◆ IF: 0.03 TO 5GHz
- ◆ RF: 1 to 18 GHz
- ◆ LO DRIVE : +10dBm(nominal)
- ◆ WIDE BANDWIDTH



### Guaranteed Specification<sup>1</sup>

Characteristics	Min.	Typ.	Max.	Test Conditions
SSB Conversion Loss and SSB Noise Figure		6.5dB 7.5dB 8.5dB	8.0dB 9.0dB 10.0dB	$f_R=5$ to 13 GHz $f_L=5$ to 13 GHz $f_I=0.03$ to 2 GHz $f_R=2$ to 16 GHz $f_L=2$ to 18 GHz $f_I=0.03$ to 4 GHz $f_R=1$ to 18 GHz $f_L=2$ to 18 GHz $f_I=0.03$ to 5 GHz
Isolation L to R L to I	16dB 18dB 20dB	20dB 30dB 30dB		$f_L=2$ to 3 GHz $f_L=3$ to 18 GHz $f_L=2$ to 18 GHz
Conversion Compression			1.0dB	$f_R$ Level+6 dBm $f_L$ Level+10 dBm
Third-Order Input Intercept Point		+18dBm +19dBm		$f_{R1}=6.00$ GHz, $f_{R2}=6.01$ GHz both at -3dBm $f_L=8$ GHz at +10dBm $f_{R1}=15.00$ GHz, $f_{R2}=15.01$ GHz both at -3dBm $f_L=18.0$ GHz at +10dBm
VSWR R L I		2 2 2		$f_R=2$ to 18 GHz $f_L=2$ to 18 GHz $f_I=0.03$ to 5 GHz

Notes:

1. Measured in a 50-ohm system with nominal LO drive and downconverter application only, unless otherwise specified.



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### Absolute Maximum Ratings

Operating Temperature: -54 °C to +100 °C

Storage Temperature: -65 °C to +100 °C

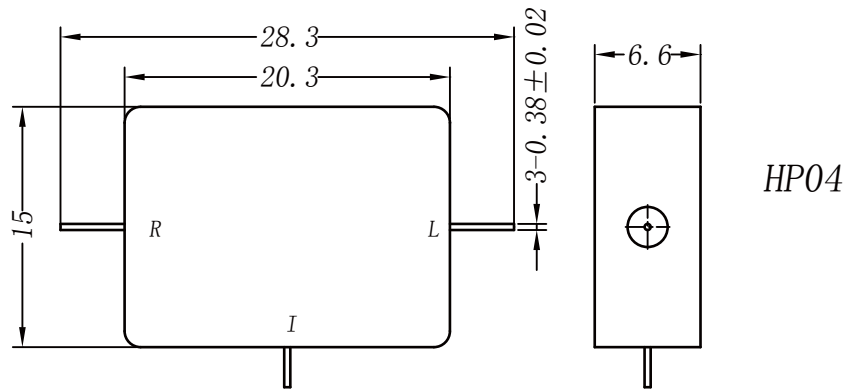
Peak Input Power: +26dBm max.at+25 °C +23dBm max. at +100 °C

Peak Input Current at 25 °C : 100mA DC

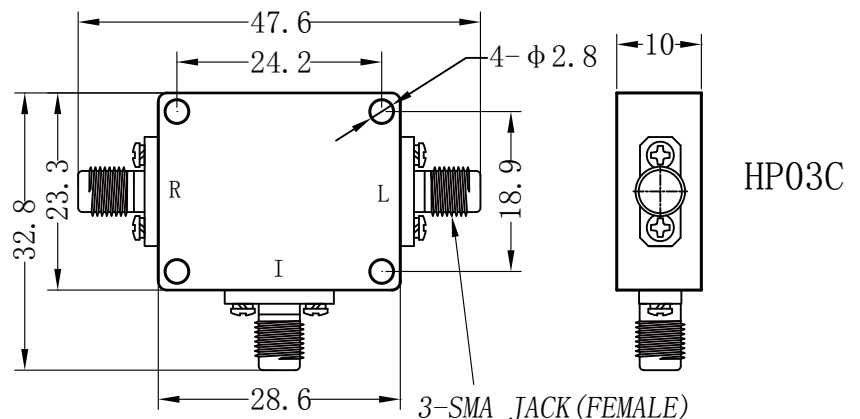
Weight M83: 12 grams(0.42 oz.) max.  
M83C: 40grams(1.41 oz.) max.

### Outline Drawings

M83  
(MINPAC)



M83C  
(CONNECTORIZED)



DIMENSIONS ARE IN MILLIMETERS