HENGWEI MICROWAVE

# DOUBLE &TRIPLE -BALANCED MIXER

## HWM86/86C

- ◆LO : 3.5 TO 18 GHz
- ◆RF: 6 TO 18 GHz
- ◆IF: DC TO 3 GHz
- ◆LO DRIVE : +7dBm(nominal)
- ◆WIDE BANDWIDTH
- ◆ROHS


## Guaranteed Specification[1,2]

| Characteristics | Min. | Typ. | Max. | Test Conditions |
|---|---|---|---|---|
| SSB Conversion Loss and SSB Noise Figure | | 6.0dB<br>7.0dB<br>7.0dB | 8.0dB<br>9.0dB<br>9.0dB | $f_R$= 6 to 16 GHz, $f_L$= 5 to 17 GHz, $f_I$ = 30 to 3000 MHz<br>$f_R$ = 16 to 18 GHz, $f_L$= 15 to 18 GHz, $f_I$ = 30 to 3000 MHz<br>$f_R$= 6 to 18 GHz, $f_L$= 3.5 to 18 GHz, $f_I$ = 30 to 3000 MHz |
| Isolation L to R<br>L to I | 23dB<br>18dB<br>16dB<br>23dB | 36dB<br>32dB<br>28dB<br>38dB | | $f_L$= 3.5 to 14 GHz<br>$f_L$= 14 to 18 GHz<br>$f_L$= 3.5 to 9 GHz<br>$f_L$= 9 to 18 GHz |
| Conversion Compression | | | 1.0dB | $f_R$ Level+5 dBm<br>$f_L$ Level+10 dBm |
| Third-Order Input Intercept Point | | +10dBm | | $f_{R1}$ =13.00 GHz,<br>$f_{R2}$ =13.01 GHz<br>both at -10dBm<br>$f_L$ =14GHz at +7dBm |
| VSWR R<br>L<br>I | | 2<br>2<br>2 | | $f_R$=2 to 18 GHz<br>$f_L$ =2 to 18 GHz<br>$f_I$ =0.03 to 5 GHz |

Notes:

1. Measured in a 50-ohm system with nominal LO drive and downconverter application only, unless otherwise specified.
2. The I-Port frequency range extends to DC for phase detection, pulse modulation, or attenuator applications; I-Port VSWR degrades from a 50-ohm system at low IF frequencies.

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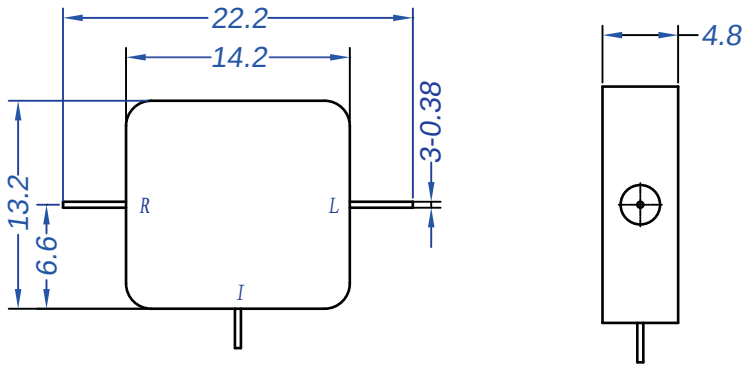
## Absolute Maximum Ratings

Operating Temperature: -54℃ to +100℃
Storage Temperature: -65℃ to +100℃
Peak Input Power: +23dBm max.at+25℃,+20dBm max. at +100℃
Peak Input Current at 25℃: 100mA DC

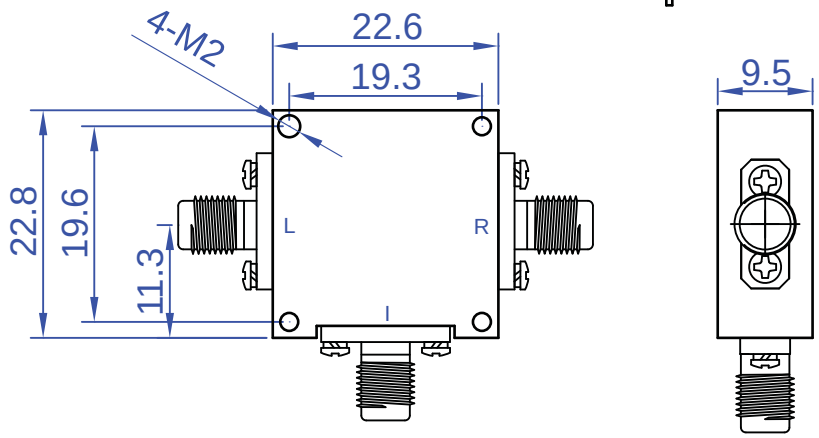
Weight M86: 6 grams(0.21 oz.) max.
M86C: 30grams(1.06 oz.) max.

## Outline Drawings

M86
(MINIPAC)




M86C
(CONNECTORIZED)




DIMENSIONS ARE IN MILLIMETERS

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