MY83H / MY83HC



Triple-Balanced Mixer

Rev. V2

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

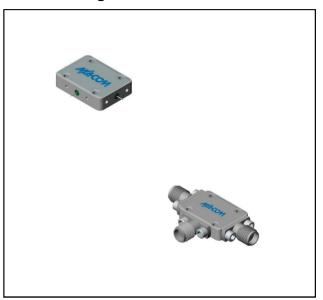
Description

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)

| Dozomotov | Took Conditions | Units | Typical | Guaranteed | |
|--|--|------------|------------|------------|---------------|
| Parameter Test Conditions | | Units | | +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 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. | dB Conversion Comp. fL = +20 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 | | |

1

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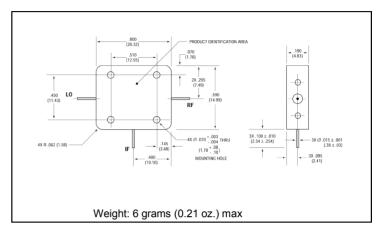
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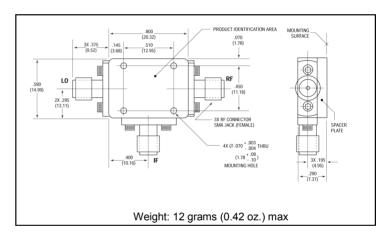
Absolute Maximum Ratings

| 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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