





Mixers Technical Data Sheet

PE8652

Features

- Double Balanced Mixer Module
- RF/LO Frequency 2 GHz to 18 GHz
- IF Bandwidth DC to 600 MHz

- LO Drive Level +10 dBm
- Low Conversion Loss of 6.5 dB
- High LO/RF Isolation of 28 dB

Applications

- Electronic Warfare
- Point-to-Point Radios
- Point-to-Multipoint Radios
- VSAT
- Radar
- Space Systems

- Test Instrumentation
- Sensors
- Telecom Infrastructure

Description

Pasternack's PE8652 is a double balanced mixer module that operates across an RF and LO frequency range of 2 GHz to 18 GHz with an IF frequency range of DC to 600 MHz. This double balanced mixer provides excellent LO to RF isolation of 28 dB. The PE8652 also provides low conversion loss of 6.5 dB. RF Mixers are commonly used to convert from one frequency to another. This is done by "mixing" two signals of different frequencies, also known as heterodyning.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|------------------------------------|---------|---------|---------|-------|
| RF Frequency Range | 2 | | 18 | GHz |
| LO Frequency Range | 2 | | 18 | GHz |
| IF Frequency Range | DC | | 600 | MHz |
| Impedance | | 50 | | Ohms |
| Conversion Loss | | 6.5 | 8 | dB |
| LO to RF Isolation | 20 | 28 | | dB |
| LO to IF Isolation | 18 | 25 | | dB |
| Input at 1dB Compression Point | | +4 | | dBm |
| Input at 3rd Order Intercept Point | | +14 | | dBm |
| LO Input Power | | +10 | | dBm |
| Input Power (CW) | | | 0.2 | Watts |
| Input Current (Peak) | | | 0.1 | Amps |

Electrical Specification Notes:

Values at 25°C, sea level.

Peak input power for any single port: +23 dBm peak

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Double Balanced Mixer Operating From 2 GHz to 18 GHz With an IF Range From DC to 600 MHz And LO Power of +10 dBm, SMA PE8652

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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Mechanical Specifications

Size

 Length
 1.55 in [39.37 mm]

 Width
 0.31 in [7.87 mm]

 Height
 0.967 in [24.56 mm]

 Weight
 0.041 lbs [18.6 g]

Housing Material and Plating Passivated Stainless Steel

Configuration

DesignDouble BalancedPackage TypeConnectorizedRF ConnectorSMA FemaleLO ConnectorSMA FemaleIF ConnectorSMA Female

Environmental Specifications

Temperature

Operating Range -45 to +90 deg C Storage Range -65 to +100 deg C

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant REACH Compliant

12/17/2015

Plotted and Other Data

Notes:

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Double Balanced Mixer Operating From 2 GHz to 18 GHz With an IF Range From DC to 600 MHz And LO Power of +10 dBm, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/50-ohm-sma-mixer-2000-mhz-18000-mhz-if-dc-600-mhz-pe8652-p.aspx

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PE8652 CAD Drawing

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