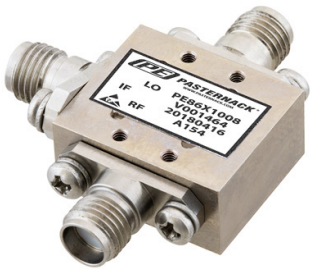
Double Balanced Mixer Operating from 6 to 18 GHz with an IF Range from DC to 6 GHz and LO Power of +15 dBm, Field Replaceable SMA



PE86X1008

Features

- Double Balanced Mixer Module
- RF/LO Frequency 6 to 18 GHz
- Wide IF Bandwidth DC to 6 GHz
- Balanced Design utilizes GaAs Schottky Diodes
- No external components or matching circuitry
- MIL-Spec Compliant
- DC Coupled Design
- LO Drive level +15 dBm
- Low Conversion loss 10 dB
- High LO/RF Isolation 28 dB
- Field Replaceable SMA Connectors
- RF/IF Input up to +10 dBm
- Operating Temperature Range 0°C to +50°C

Applications

- Electronic Warfare
- Point-to-Point Radios
- Point-to-Multipoint Radios
- VSAT
- Radar
- Space Systems
- Test Instrumentation
- Sensors
- Telecom Infrastructure
- Military End-Use

Description

The PE86X1008 is a broadband double balanced mixer that operates across an RF and LO frequency range from 6 to 18 GHz with an IF frequency range of DC to 6 GHz and supports an LO drive level of +15 dBm typical. The 50 ohm design utilizes high performance GaAs Schottky diodes in a balanced configuration that's DC coupled. Exceptional typical performance includes 10 dB conversion loss, 28 dB LO to RF Isolation, and 20 LO to IF Isolation. The compact and rugged drop-in pin package supports field replaceable SMA connectors, operates over a temperature range of 0°C to +50°C, and is designed to meet MIL-STD-202 environmental test conditions for Humidity, Shock, Vibration, and Altitude for high reliability.

Electrical Specifications +25°C, 50 Ohm System

Description	Min	Typ	Max	Units
RF Frequency Range	6		18	GHz
LO Frequency Range	6		18	GHz
IF Frequency Range	DC		6	GHz
Impedance		50		Ohms
Conversion Loss		10		dB
LO to RF Isolation		28		dB
LO to IF Isolation		20		dB
RF Input Power			+10	dBm
LO Input Power		+15		dBm
IF Input Power			+10	dBm

Mechanical Specifications

Size

Configuration

Design	Double Balanced
Package Type	Connectorized

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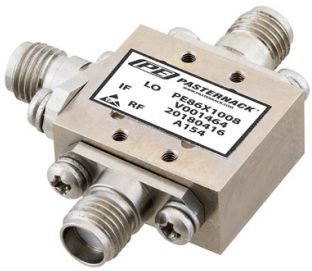

PE86X1008

Connector Option	Field Replaceable
RF Connector	SMA Female
LO Connector	SMA Female
IF Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	0 to +50 deg C
Humidity	MIL-STD-202F, Method 103B, Condition B
Shock	MIL-STD-202F, Method 213B, Condition B
Vibration	MIL-STD-202F, Method 204D, Condition B
Altitude	MIL-STD-202F, Method 105C, Condition B

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Double Balanced Mixer Operating from 6 to 18 GHz with an IF Range from DC to 6 GHz and LO Power of +15 dBm, Field Replaceable SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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 6 to 18 GHz with an IF Range from DC to 6 GHz and LO Power of +15 dBm, Field Replaceable SMA PE86X1008

URL: https://www.pasternack.com/sma-mixer-6-18-ghz-if-dc-6-ghz-pe86x1008-p.aspx

PE86X1008 CAD Drawing

Double Balanced Mixer Operating from 6 to 18 GHz with an IF Range from DC to 6 GHz and LO Power of +15 dBm, Field Replaceable SMA