PASTERNACK®
THE ENGINEER'S RF SOURCE

Frequency Divider, Divide by 2 Prescaler Module, 500 MHz to 18 GHz, SMA

Frequency Dividers Technical Data Sheet PE88D2001

Features

- Wide Input Frequency Range: 500 MHz to 18 GHz
- Divide-by-2 Prescaler
- Output Frequency 250 MHz to 9 GHz
- Output Power: -4 dBm typical
- Low SSB Phase Noise: -147 dBc/Hz @ 100 KHz offset typical
- RoHS & REACH Compliant Assembly
- Bias Voltage: +12 Vdc
- Operational Temperature Range: -40°C to +85°C
- Compact SMA Connectorized Package
- Designed to meet MIL-STD-202 Test Conditions

Applications

- PLL Applications
- Test Instrumentation
- Countermeasures
- Point to Point Microwave Radio
- SATCOM
- MILCOM
- Base Stations

Description

The PE88D2001 is a coaxial packaged Frequency Divider module that operates across a wide input frequency range from 500 MHz to 18 GHz and supports a divide ratio of 2. Output Frequency is 250 MHz to 9 GHz. Impressive broadband typical performance of this Prescaler includes output power of -4 dBm and SSB phase noise of -147 dBc/Hz at 100 KHz offset. This exceptional technical performance is achieved through the use of a hybrid MIC PCB solder assembly which is RoHS and REACH compliant. This frequency divider design requires +12 Vdc typical bias voltage, operates over maximum temperature range of -40°C to +85°C, and has an absolute maximum rating for input power of +13 dBm. The rugged and compact package suppors SMA Female connectors, RFI and Ground Pins. For highly reliable operation, the model is guaranteed to meet MIL-STD-202 environmental test conditions for Humidity, Shock, Vibration, and Altitude.

Electrical Specifications (TA= 25°C, Vd1 = 12 Vdc, Id1 = 85 mA)

Description	Minimum	Typical	Maximum	Units
Input Frequency (Sine Wave)	0.5		18	GHz
Output Frequency (Sine Wave Input)	0.25		9	GHz
Input Power (CW)	-15	0	10	dBm
Output Power	-7	-4		dBm
Phase Noise @100kHz Offset		-147		dBc/Hz
Operating DC Voltage 1	9	12	15	V
Operating DC Current 1		85	100	mA

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: Frequency Divider, Divide by 2 Prescaler Module, 500 MHz to 18 GHz, SMA PE88D2001

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
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Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	0.5 to 1	1 to 2	2 to 14	14 to 16	16 to 18	GHz
Input Power (CW), Max	10	10	10	5	3	dBm
Input Power (CW), Typ	5	0	0	0	0	dBm
Input Power (CW), Min	3	-10	-15	-15	-10	dBm

Mechanical Specifications

Size

Length	1.25 in [31.75 mm]
Width	1.25 in [31.75 mm]
Height	0.563 in [14.3 mm]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-55 to +125 deg C
Humidity	MIL-STD-202F, Method 103B, Condition B
Shock	MIL-STD-202F, Method 213B, Codition 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:

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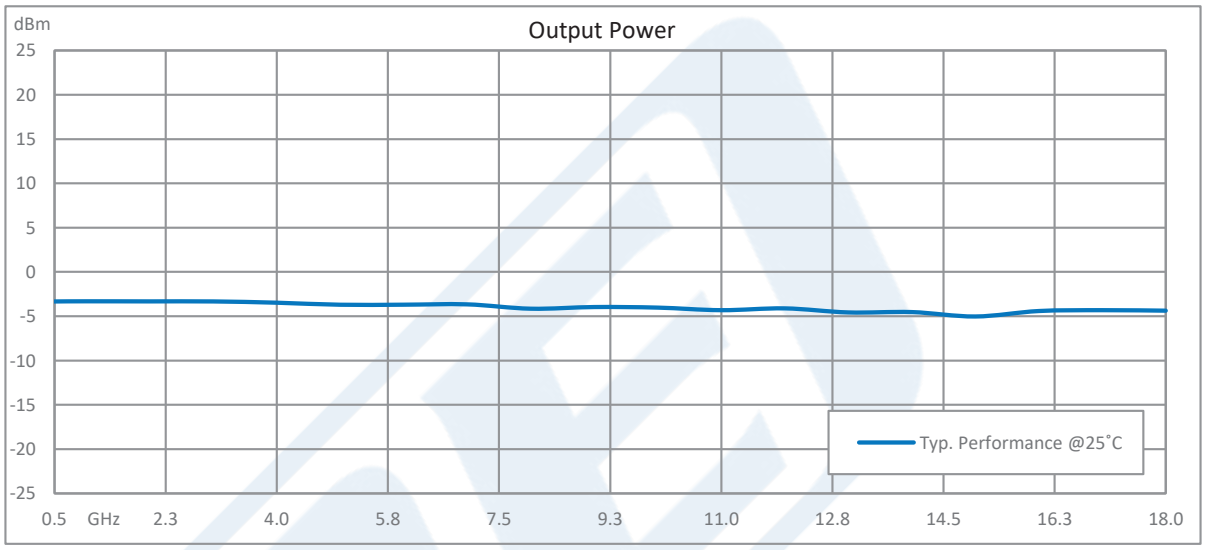
Typical Performance Data



Frequency Divider, Divide by 2 Prescaler Module, 500 MHz to 18 GHz, 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.

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URL: https://www.pasternack.com/frequency-divider-divide-2-prescaler-module-500-mhz-18-ghz-sma-pe88d2001-p.aspx

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PE88D2001 CAD Drawing

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