

4 Way SMA Power Divider from 6 GHz to 18 GHz Rated at 30 Watts



PE20DV1048

Features

- Ultra Wide Band Operation
- 30 watt CW Rating
- 6 to 18 GHz
- SMA Female Connector
- Meets Standards for Humidity, Shock, Vibration, Altitude

Applications

- Communications Systems
- Amplifier Systems
- Amplifier Power Dividing
- Aerospace/Aviation
- Defense Applications

Description

PE20DV1048 is a passive 4 way RF Power Divider with 50 ohm SMA female connectors operating from 6 to 18 GHz, with a max input power of 30 watts. The PE20DV1048 has less than 19 dB Isolation, 1 dB Maximum Insertion loss and a Max VSWR of 1.55:1; along with a phase balance of ± 6 degrees and an amplitude balance of ± 0.3 dB. The RF Divider operates in a temperature range from -45°C to 85°C and is rated for Humidity, Shock, Vibration, and Altitude. Power dividers have many applications and so perform many valuable functions within the RF/Microwave world. Examples are antenna beam forming, taps for cable distributed systems combining feeds to and from antennae.

Electrical Specifications

Number of Output Ports 4

Description	Min	Typ	Max	Units
Frequency Range	6		18	GHz
Impedance		50		Ohms
Input VSWR		1.35:1	1.55:1	
Insertion Loss		0.7	1	dB
Isolation	16	19		dB
Amplitude Balance		± 0.4	± 0.5	dB
Phase Balance		± 3	± 6	Degrees
Nominal Power Splitting		6		dB
Input Power (CW)			30	Watts
Reverse Power (CW)			1	Watt
Input Power (Peak)			300	Watts

Mechanical Specifications

Size

Length	2 in [50.8 mm]
Width	0.38 in [9.65 mm]
Height	2 in [50.8 mm]
Weight	0.165 lbs [74.84 g]
Finish	Gray
Housing Material and Plating	Aluminum

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Configuration

Package Type	Connectorized
Input Connector	SMA Female
Output Connectors	SMA Female

Environmental Specifications

Temperature

Operating Range	-45 to +85 deg C
Storage Range	-55 to +125 deg C
Humidity	100% RH at 35°C, 95% RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data

4 Way SMA Power Divider from 6 GHz to 18 GHz Rated at 30 Watts 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: [4 Way SMA Power Divider from 6 GHz to 18 GHz Rated at 30 Watts PE20DV1048](#)

URL: <https://www.pasternack.com/4-way-sma-power-divider-18-ghz-pe20dv1048-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE20DV1048 CAD Drawing

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