

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

FMDV1048



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

FMDV1048 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 FMDV1048 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	0.1655 lbs [75.07 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 Power Divider SMA Interface from 6 GHz to 18 GHz Rated at 30 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [4 Way Power Divider SMA Interface from 6 GHz to 18 GHz Rated at 30 Watts FMDV1048](#)

URL: <https://www.fairviewmicrowave.com/4-way-power-divider-sma-18-ghz-fmdv1048-p.aspx>

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FMDV1048 CAD Drawing
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