

Low PIM 4 Way N-type Power Divider from 555 MHz to 6 GHz Rated at 80 Watts, IP65 Rated



PE20DV1290

Features

- Broadband frequency coverage from 555 MHz to 6 GHz
- 4 Way Power Divider
- Low PIM performance of ≈ -153 dBc (Typical = -160 dBc)
- Tested using two 43 dBm carriers
- Low insertion loss for improved system efficiency
- High port-to-port isolation 18 dB Min
- Excellent VSWR performance 1.2:1 Typ
- 80 watt average input power handling
- IP65 weather-resistant enclosure for outdoor installations
- Wide operating temperature range from -40°C to $+75^{\circ}\text{C}$
- N-Type Female connectors

Applications

- Distributed Antenna Systems (DAS)
- Cellular base stations
- 4G LTE and 5G wireless networks
- Public safety communication systems
- Private LTE and private 5G networks
- In-building wireless coverage
- Wireless infrastructure
- Multi-operator RF distribution systems

Description

The PE20DV1290 N-Type Low PIM RF 4 Way Power Divider is designed for broadband wireless communication systems requiring low passive intermodulation and excellent RF performance. Covering a frequency range of 555 MHz to 6 GHz, this power divider provides equal power division with low insertion loss 0.6 dB typ, high port isolation 18 dB Min, and excellent VSWR 1.2:1 Typ across multiple wireless frequency bands. Featuring a Low PIM performance of -153 dBc maximum (-160 dBc typical) when tested with two 43 dBm carriers, the divider is well suited for modern DAS, small cell, cellular infrastructure, public safety, CBRS, and private network deployments. The rugged IP65-rated enclosure, RoHS-compliant construction, and wide operating temperature range make it suitable for demanding indoor and outdoor installations.

Electrical Specifications

Number of Output Ports 4

Description	Min	Typ	Max	Units
Frequency Range	0.555		6	GHz
Impedance		50		Ohms
Input VSWR		1.2:1	1.3:1	
Insertion Loss		0.5	1.1	dB
Isolation	18	22		dB
Nominal Power Splitting		6		dB
Passive Intermodulation		-160	-153	dBc
2x43dBm				
Input Power (CW)			80	Watts
Input Power (Peak)			800	Watts

Specifications by Frequency

Description	F1	F2	F3	Units
Frequency Range	0.555-2.7	2.7-3.8	3.8-6	GHz

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Specifications by Frequency

Description	F1	F2	F3	Units
Insertion Loss, Typ	0.5	0.6	1.1	dB

Electrical Specification Notes:

Combiner mode power rating: 1 W CW, 10 W peak

Mechanical Specifications

Size

Length	4.45 in [113.03 mm]
Width	4.06 in [103.12 mm]
Height	0.87 in [22.1 mm]
Weight	1.23 lbs [557.92 g]
Housing Material and Plating	Brass, Copper-Tin-Zinc

Configuration

Input Connector	N Female
Output Connectors	N Female

Environmental Specifications

Temperature

Operating Range	-40 to +75 deg C
Storage Range	-50 to +85 deg C
Humidity	<95%
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6-Fc
Altitude	<5000m
Thermal Shock	IEC 60068-2-14-Na

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

Plotted and Other Data

Notes:

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Typical Performance Data

Low PIM 4 Way N-type Power Divider from 555 MHz to 6 GHz Rated at 80 Watts, IP65 Rated 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: [Low PIM 4 Way N-type Power Divider from 555 MHz to 6 GHz Rated at 80 Watts, IP65 Rated PE20DV1290](#)

URL: <https://www.pasternack.com/4-way-n-power-divider-6-ghz-pe20dv1290-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.

PE20DV1290 CAD Drawing

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