



## 4 Way N Power Divider from 1 GHz to 4 GHz Rated at 30 Watts

### Power Dividers Technical Data Sheet

PE20DV1051

#### Features

- Ultra Wide Band Operation
- 30 watt CW Rating
- 1 to 4 GHz
- N-Type Female Connector
- Meets Standards for Humidity, Shock, Vibration, Altitude

#### Applications

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

#### Description

PE20DV1051 is a passive 4 way RF Power Divider with 50 ohm N-Type female connectors operating from 1 to 4 GHz, with a max input power of 30 watts. The PE20DV1051 has less than 22 dB Isolation, 1.2 dB Maximum Insertion loss and a Max VSWR of 1.4:1; along with a phase balance of  $\pm 5$  degrees and an amplitude balance of  $\pm 0.4$  dB. The RF Divider operates in a temperature range from  $-45^{\circ}\text{C}$  to  $85^{\circ}\text{C}$  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	Minimum	Typical	Maximum	Units
Frequency Range	1		4	GHz
Impedance		50		Ohms
Input VSWR		1.3:1	1.4:1	
Insertion Loss		0.9	1.2	dB
Isolation	20	22		dB
Amplitude Balance		$\pm 0.3$	$\pm 0.4$	dB
Phase Balance		$\pm 4$	$\pm 5$	Degrees
Input Power (CW)			30	Watts
Reverse Power (CW)			2	Watts
Input Power (Peak)			300	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4 Way N Power Divider from 1 GHz to 4 GHz Rated at 30 Watts PE20DV1051](#)



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#### Mechanical Specifications

##### Size

Length	1.93 in [49.02 mm]
Width	0.79 in [20.07 mm]
Height	3.82 in [97.03 mm]
Weight	0.539 lbs [244.49 g]

##### Finish

Housing Material and Plating Aluminum

##### Configuration

Package Type	Connectorized
Input Connector	N Female
Output Connectors	N 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:

4 Way N Power Divider from 1 GHz to 4 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.

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URL: <https://www.pasternack.com/4-way-n-power-divider-4-ghz-pe20dv1051-p.aspx>

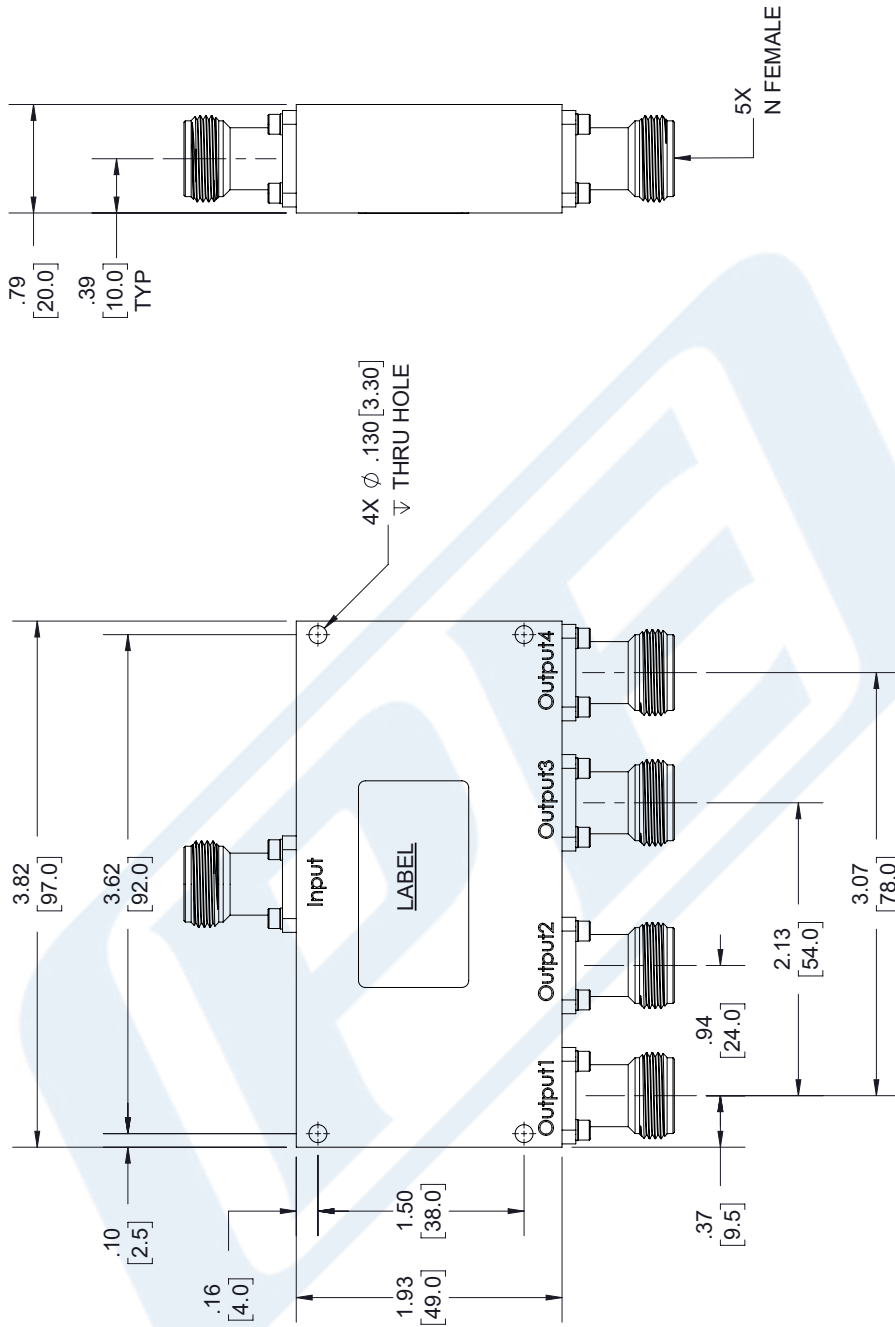
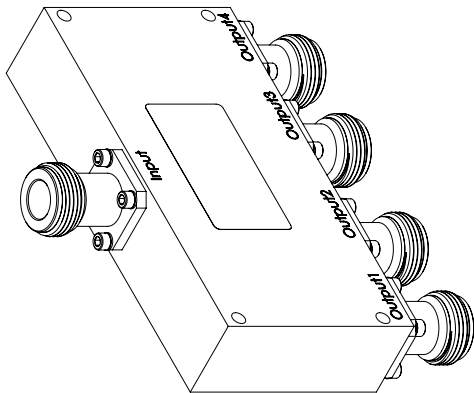
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE20DV1051 CAD Drawing

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### REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	5/18/2020	S. PONG



UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS  
.XX = ±.02 [.51] ±.1/32  
.XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:  
L ≤ 12 [305] = +1 [25] / -0  
12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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SIZE A

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DRAWN BY K.Dang

REV A

LABEL:

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PE20DV1051  
D/C: YYWW

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