



## 4 Way Broadband Combiner from 20 MHz to 1 GHz Type N

### RF Combiners Technical Data Sheet

PE20S0003

#### Features

- 20 to 1000 MHz Frequency
- 300 watt max power
- Insertion Loss: < 0.75 dB
- Phase Balance:  $\pm 5$  degrees
- Amplitude Balance:  $\pm 0.25$  dB
- Isolation: >12 dB
- High Power Handling Capability

#### Applications

- Communications Systems
- Power Combining
- PCS, GSM, LTE, Cellular
- Amplifier Systems
- Amplifier Power Combining
- Wireless Infrastructures
- Defence Applications

#### Description

PE20S0003 is a passive 4 way High Power Broadband RF Combiner with 50 ohm N connectors operating from 20 to 1000 MHz, with max power at 300 watts. The PE20S0003 has greater than 12 dB typical isolation, less than 0.75 dB typical low insertion loss and a Max VSWR of 1.25:1; along with a phase balance of  $\pm 5$  degrees and an amplitude balance of  $\pm 0.25$  dB. The RF Combiner operates in a temperature range from -55°C to 85°C, with a foot print of 5.10"x4.72"x1.54".

#### Electrical Specifications

Design  
Number of Input Ports

Reactive  
4

Description	Minimum	Typical	Maximum	Units
Frequency Range	20		1,000	MHz
Impedance		50		Ohms
Output VSWR			1.25:1	
Insertion Loss			0.75	dB
Isolation	12			dB
Amplitude Balance		$\pm 0.25$		dB
Phase Balance		$\pm 5$		Degrees
Power Handling (CW)			300	Watts

\*\*See Electrical Notes

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	0.02 to 0.125	0.125 to 1				GHz
Isolation, Min	12	15				dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4 Way Broadband Combiner from 20 MHz to 1 GHz Type N PE20S0003](#)



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#### Electrical Specification Notes:

The device is intended for coherent signal combining.

#### Mechanical Specifications

##### Size

Length

5.1 in [129.54 mm]

Width

4.72 in [119.89 mm]

Height

1.54 in [39.12 mm]

Weight

2.59 lbs [1.17 kg]

Housing Material and Plating

Aluminum Alloy

##### Configuration

Input Connector

N Female

Output Connectors

N Female

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +85 deg C

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

#### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4 Way Broadband Combiner from 20 MHz to 1 GHz Type N PE20S0003](#)

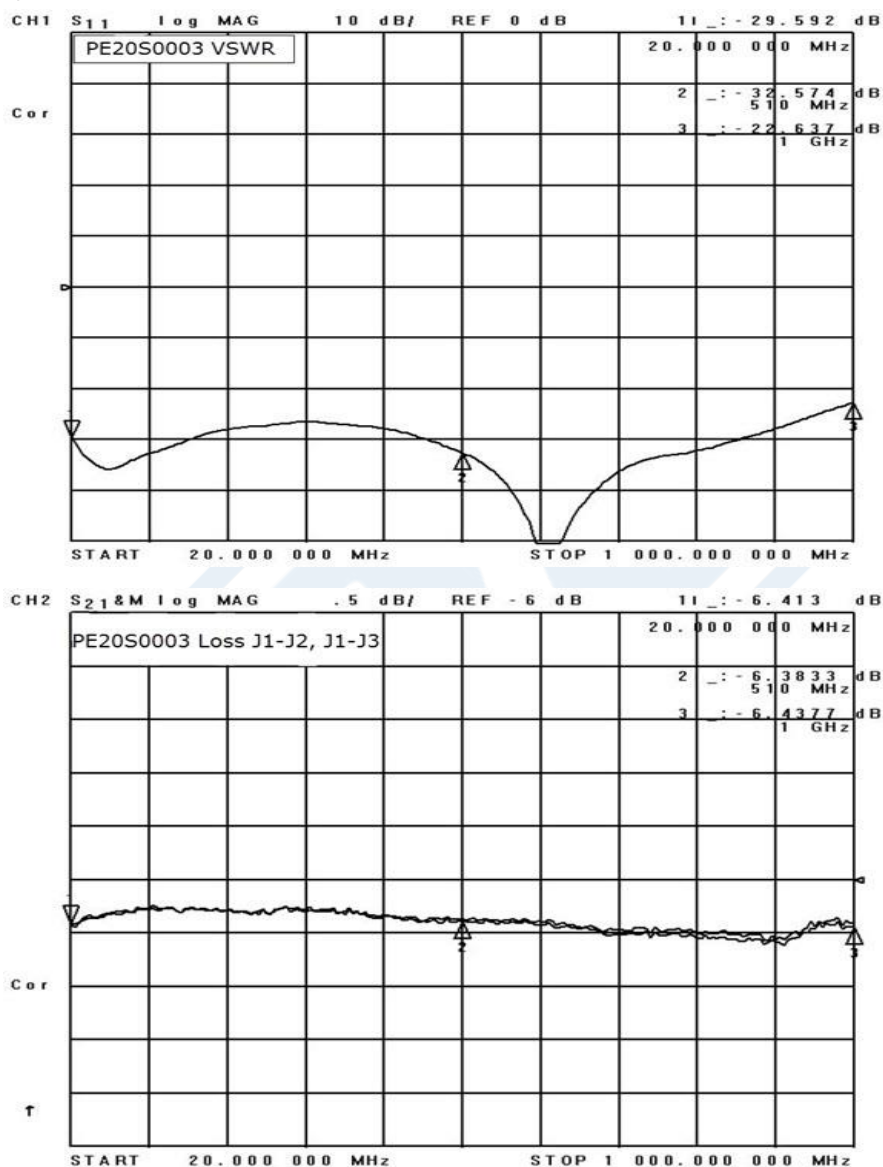


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#### Typical Performance Data



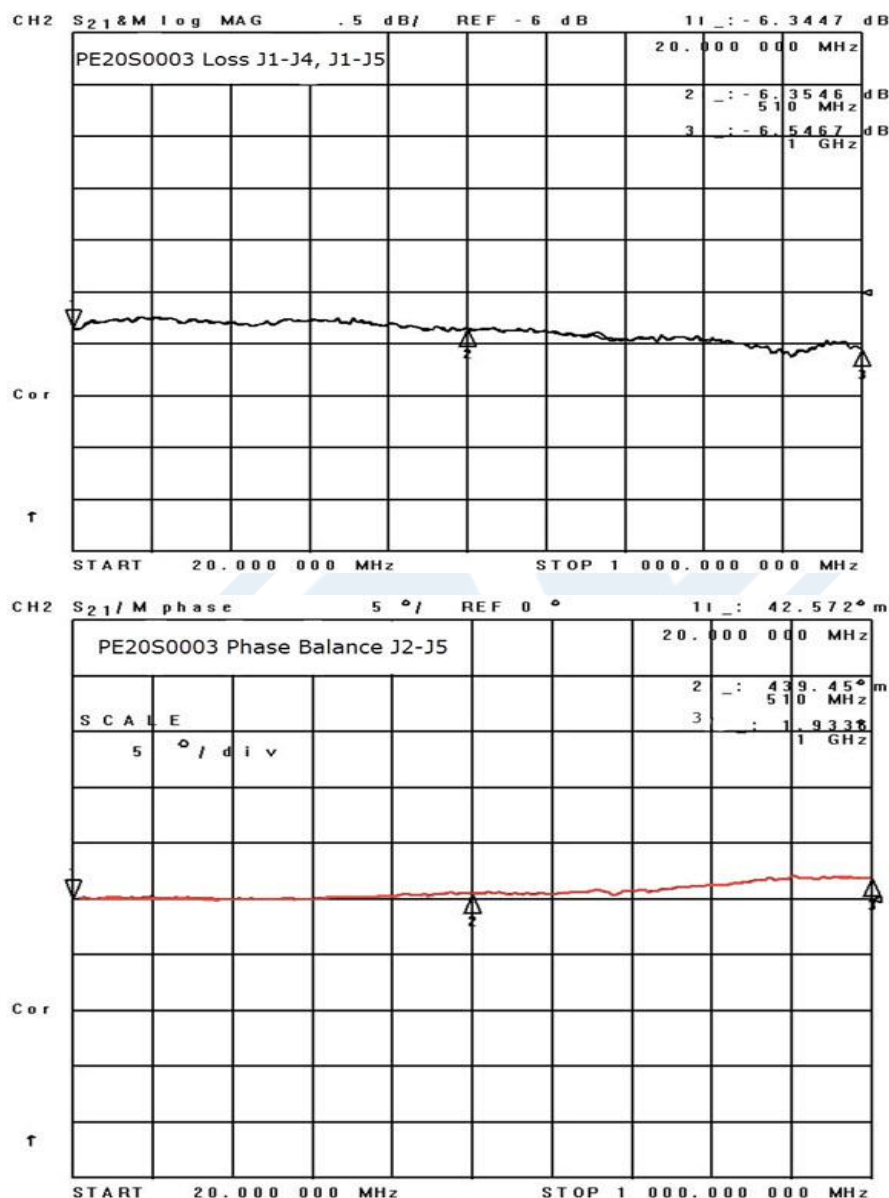
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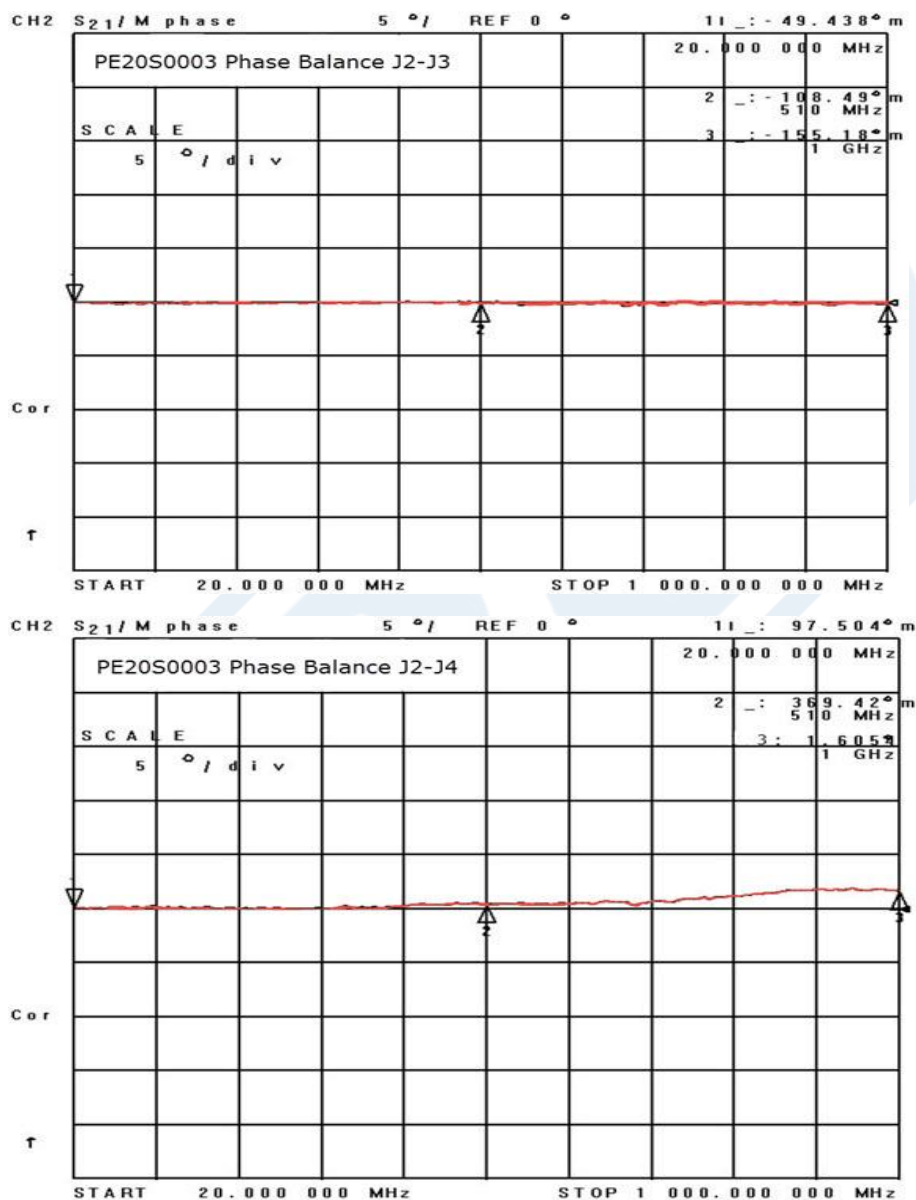
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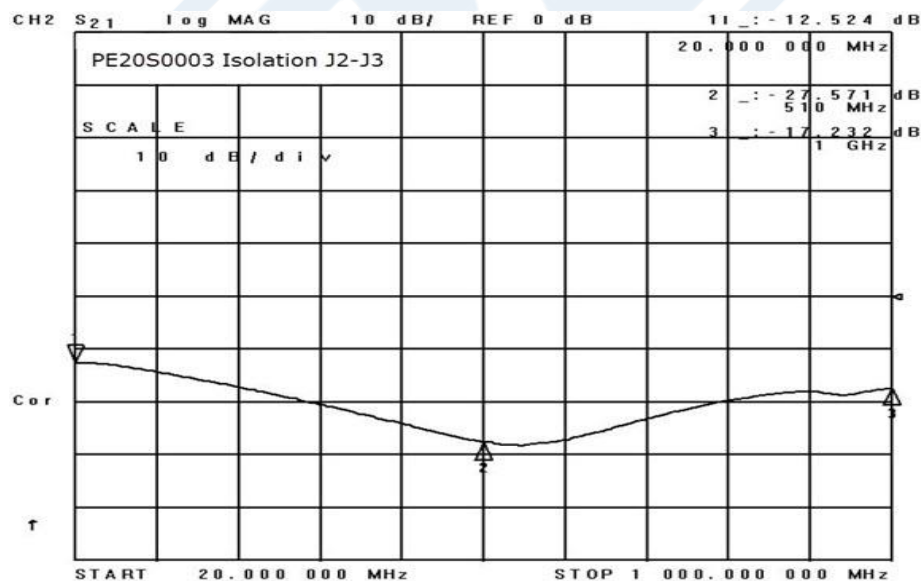
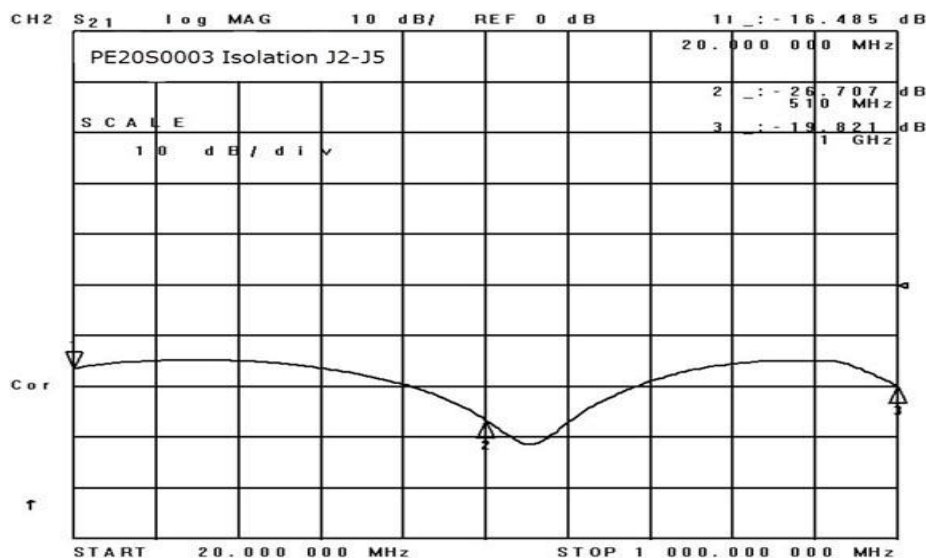
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4 Way Broadband Combiner from 20 MHz to 1 GHz Type N from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest 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 Broadband Combiner from 20 MHz to 1 GHz Type N PE20S0003](https://www.pasternack.com/4-way-n-broadband-power-combiner-20-1000-mhz-300-watts-pe20s0003-p.aspx)

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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.



# PE20S0003 CAD Drawing

4 Way Broadband Combiner from 20 MHz to 1 GHz Type N

