



2 Way Broadband Combiner from 800 MHz to 4.2 GHz SMA

RF Combiners Technical Data Sheet

PE20S0012

Features

- 800 to 4200 MHz Frequency
- 200 watt max power
- Insertion Loss: < 1.0 dB
- Phase Balance: ± 5 degrees
- Amplitude Balance: ± 0.25 dB
- Isolation: >10 dB
- High Power Handling Capability

Applications

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

Description

PE20S0012 is a passive 2 way High Power Broadband RF Combiner with 50 ohm connectors operating from 800 to 4200 MHz, with max power at 200 watts. The PE20S0012 has greater than 10 dB typical isolation, less than 1.0 dB typical low insertion loss and a Max VSWR of 1.30:1; along with a phase balance of ± 5 degrees and an amplitude balance of ± 0.25 dB. The RF Combiner operates in a temperature range from -55°C to 85°C, with a foot print of 4.88"x3"x1.17".

Electrical Specifications

| | |
|-----------------------|----------|
| Design | Reactive |
| Number of Input Ports | 2 |

| Description | Minimum | Typical | Maximum | Units |
|---------------------|---------|------------|---------|---------|
| Frequency Range | 0.8 | | 4.2 | GHz |
| Impedance | | 50 | | Ohms |
| Output VSWR | | | 1.3:1 | |
| Insertion Loss | | | 1 | dB |
| Isolation | 10 | | | dB |
| Amplitude Balance | | ± 0.25 | | dB |
| Phase Balance | | ± 5 | | Degrees |
| Power Handling (CW) | | | 200 | Watts |

**See Electrical Notes

Electrical Specification Notes:
The device is intended for coherent signal combining.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2 Way Broadband Combiner from 800 MHz to 4.2 GHz SMA PE20S0012](#)



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Mechanical Specifications

Size

| | |
|--------|----------------------|
| Length | 5.2 in [132.08 mm] |
| Width | 3 in [76.2 mm] |
| Height | 1.17 in [29.72 mm] |
| Weight | 1.247 lbs [565.63 g] |

Housing Material and Plating Aluminum Alloy

Configuration

| | |
|-------------------|------------|
| Input Connector | SMA 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: [2 Way Broadband Combiner from 800 MHz to 4.2 GHz SMA PE20S0012](#)



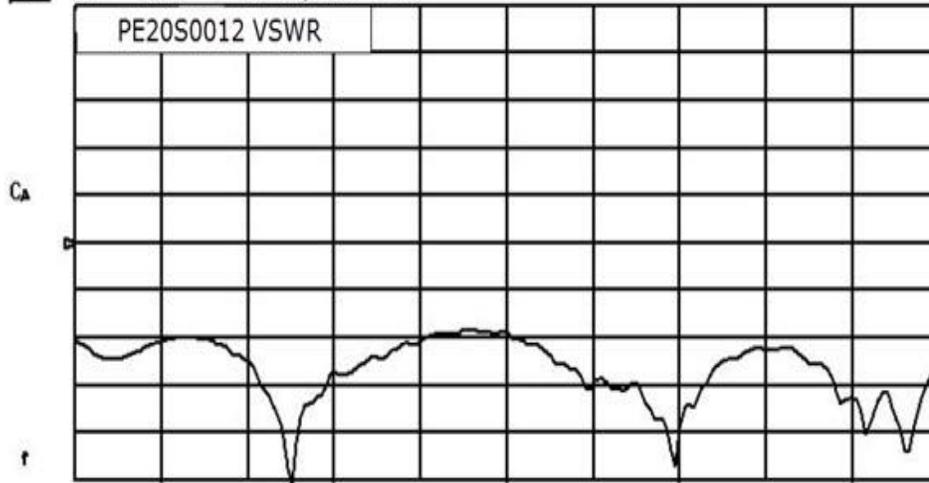
2 Way Broadband Combiner from 800 MHz to 4.2 GHz SMA

RF Combiners Technical Data Sheet

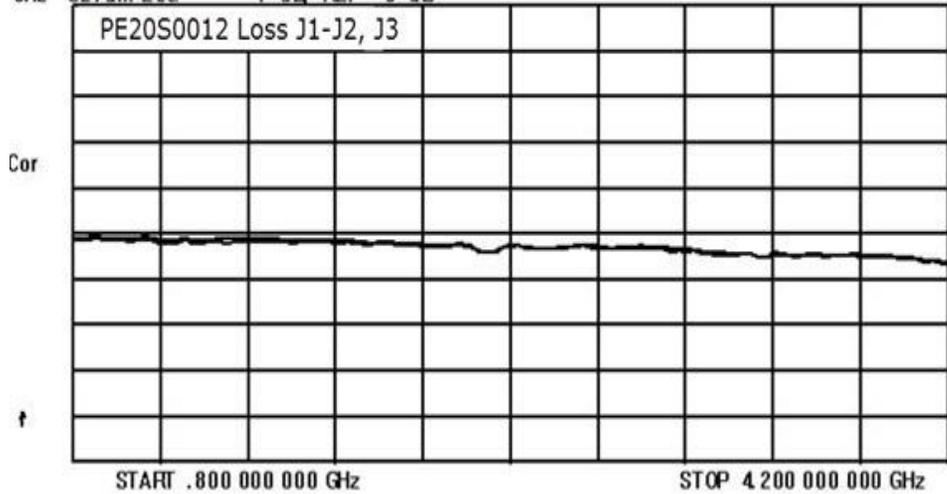
PE20S0012

Typical Performance Data

[CFI] S11 LOG 10 dB/ REF 0 dB



CH2 S21&M LOG 1 dB/ REF -3 dB



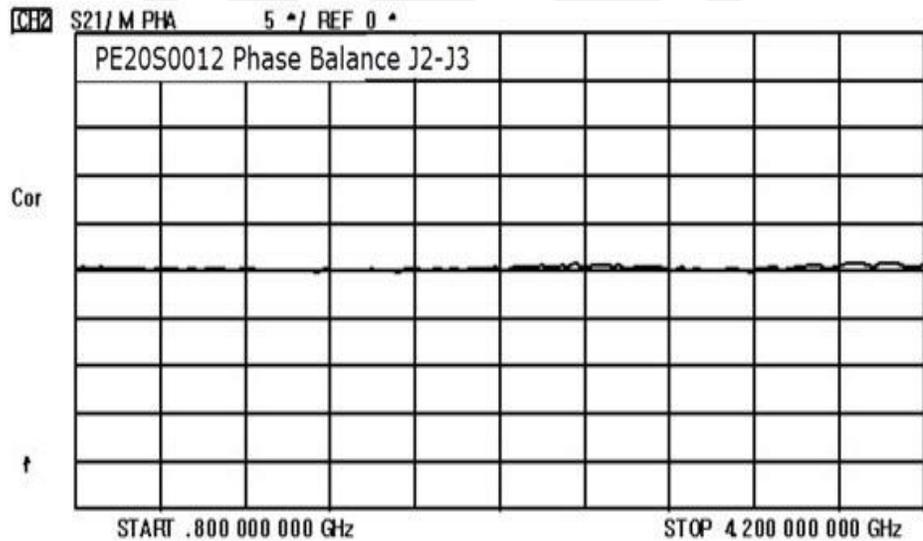
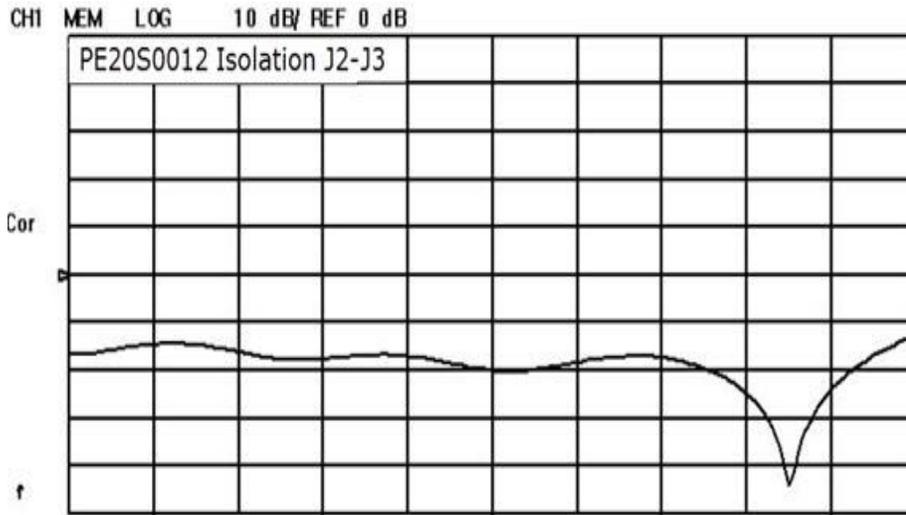
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2 Way Broadband Combiner from 800 MHz to 4.2 GHz SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

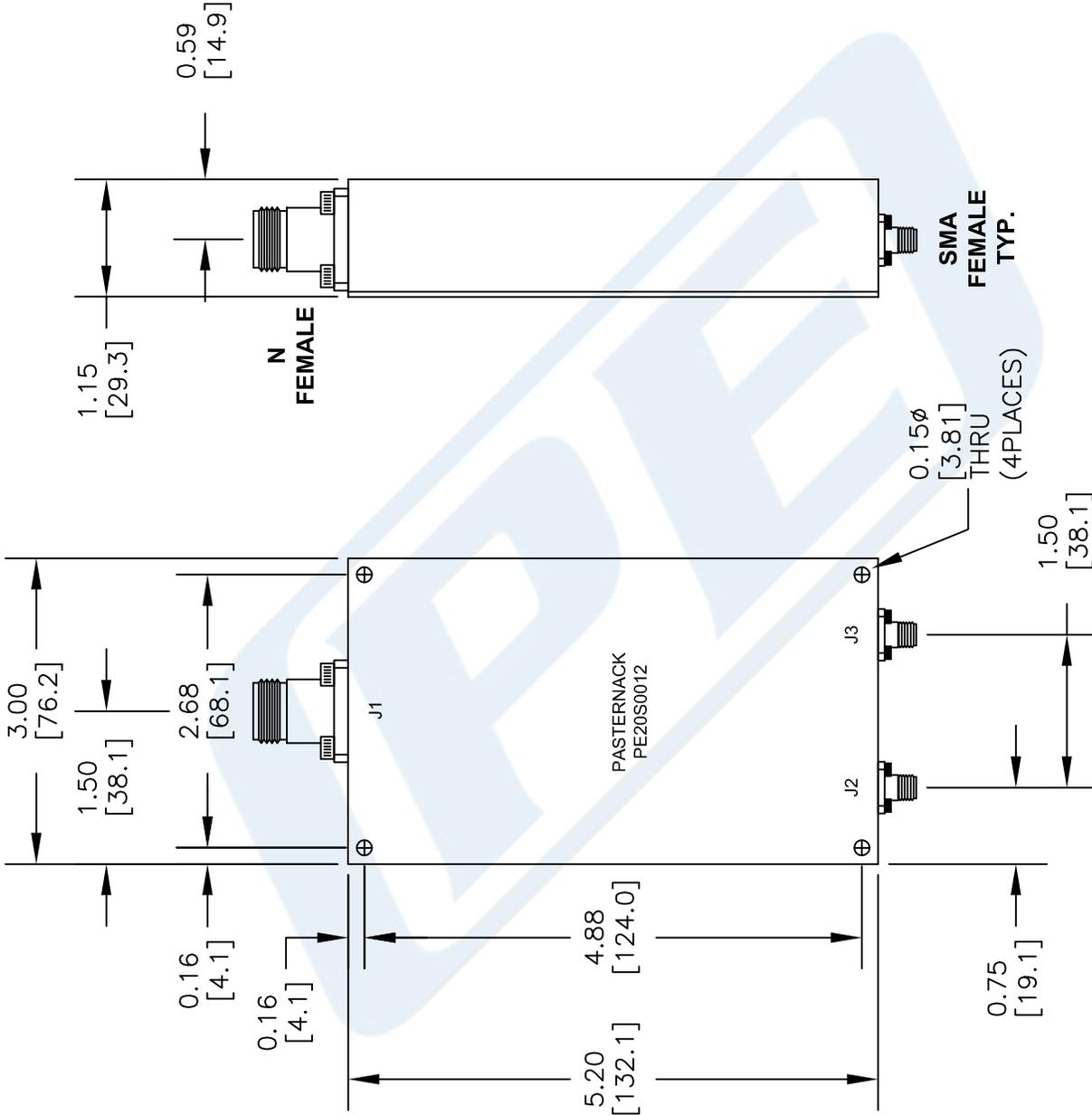
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2 Way Broadband Combiner from 800 MHz to 4.2 GHz SMA PE20S0012](https://www.pasternack.com/2-way-sma-broadband-power-combiner-800-mhz-4.2-ghz-200-watts-pe20s0012-p.aspx)

URL: <https://www.pasternack.com/2-way-sma-broadband-power-combiner-800-mhz-4.2-ghz-200-watts-pe20s0012-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.

PE20S0012 CAD Drawing

2 Way Broadband Combiner from 800 MHz to 4.2 GHz SMA



DWG TITLE

PE20S0012

NOTES:
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
 3. DIMENSIONS ARE IN INCHES [mm].

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FSCM NO. 53919

CAD FILE 071614

SCALE N/A

SIZE A

150