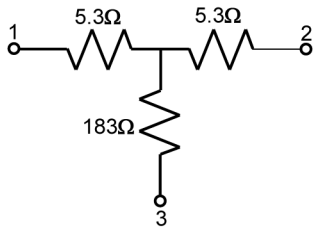
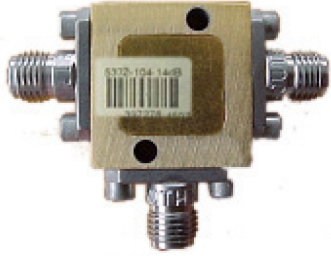


# Z-Matched Pick-off Tee

## PSPL5372 Datasheet

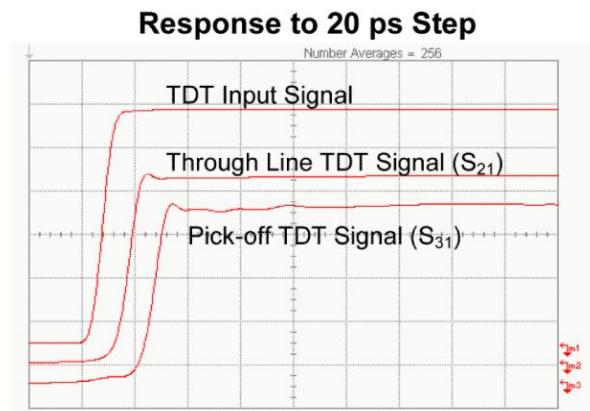
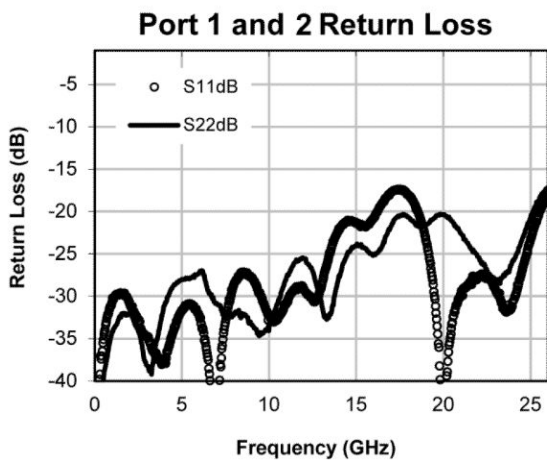
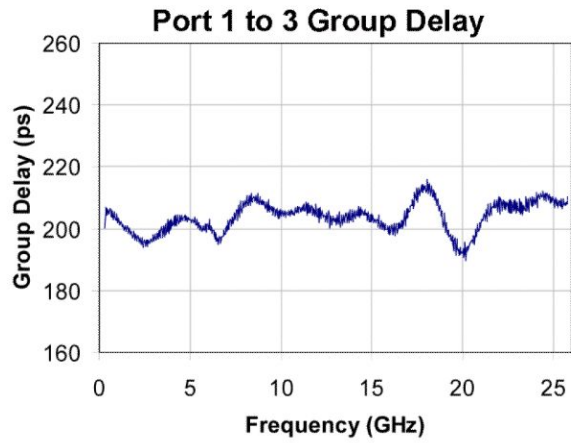
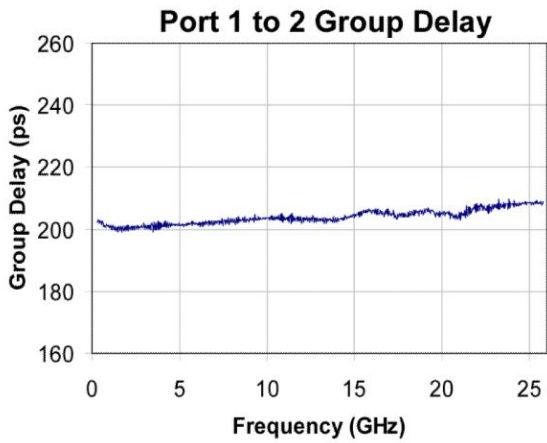
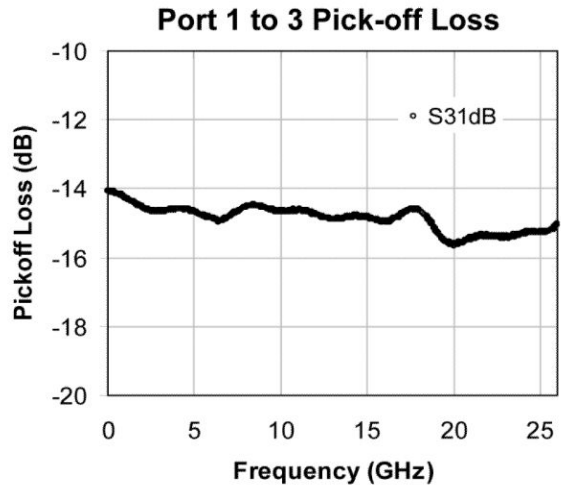


The PSPL5372 Z-Matched Pick-off Tee is an ultra-broadband resistive device that provides a scaled 5x (14 dB) pick-off of the input signal. The PSPL5372 exhibits excellent through-line impedance match to 50 ohms for frequencies from DC to 26 GHz, unlike conventional 14 dB pick-off tees that have DC resistance of 42 ohms at the input. The PSPL5372 features outstanding insertion loss and group delay flatness. Either Port 1 or Port 2 may be used as the input.

### Key performance specifications

- Excellent Through-Line Impedance Match
- Minimizes Signal Reflections
- DC to 26 GHz
- 5x (14 dB) Pick-off

Typical performance

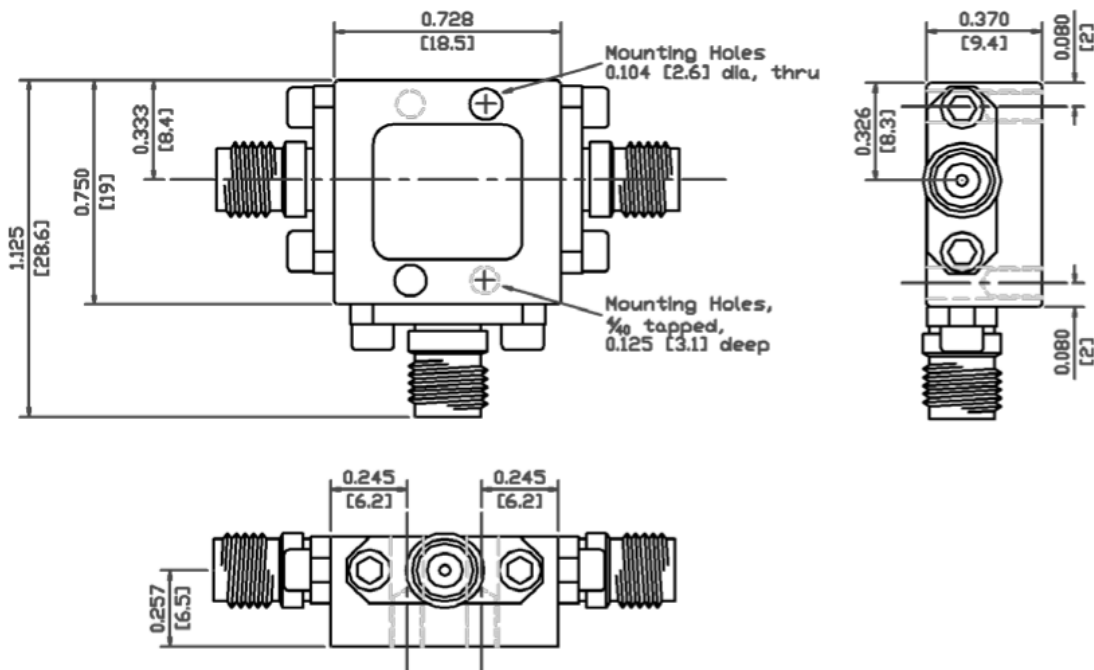


Amplitude scale: Input and S<sub>21</sub> = 35 mV/div, S<sub>31</sub> = 9 mV/div, Time scale = 50ps/div

## Specifications

| Parameter <sup>1</sup>                         | Minimum       | Typical  | Maximum  | Comments                       |
|--|---------------|----------|----------|--------------------------------|
| Pick-off Insertion Loss (S31)                  | -13.6 dB      | -14.7 dB | -16.4 dB | Specified from 40 MHz – 20 GHz |
| Through-line Insertion Loss (S21)              | -1.7 dB       | -2.0 dB  | -3.1 dB  | Specified from 40 MHz – 20 GHz |
| Return Loss to 14 GHz (S11/S22)                |               | -25 dB   |          | Also see S11/S22 plot          |
| Return Loss to 20 GHz (S11/S22)                | -15 dB        |          |          | Also see S11/S22 plot          |
| Through-line rise time (10% - 90%)             |               | 12 ps    |          | Port 1 to 2, see plot          |
| Pick-off rise time (10% - 90%)                 |               | 15 ps    |          | Port 1 to 3, see plot          |
| Through-line Group Delay Variation             |               | ±5 ps    |          | Port 1 to 2, DC to 26 GHz      |
| Pick-off Group Delay Variation                 |               | ±10 ps   |          | Port 1 to 3, DC to 26 GHz      |
| Input/Output Impedance @ DC (port 1 or port 2) |               | 50 Ω     |          |                                |
| Temperature Range (°C)                         | -55 °C        |          | 90 °C    | Operating                      |
| Input Power, (Port 1 or 2, Avg)                |               |          | 2 W      |                                |
| Connectors                                     | SMA jacks (f) |          |          |                                |
| Warranty                                       | One year      |          |          |                                |

### Mechanical dimensions



<sup>1</sup> All parameters listed are typical unless max/min guaranteed limits are provided. The DC specs are valid only when used with 50 Ω source and terminations.

## Ordering information

### Models

PSPL5372

Pick-Off Tee, 2 port Z-matched

**ASEAN / Australasia** (65) 6356 3900  
**Belgium** 00800 2255 4835\*  
**Central East Europe and the Baltics** +41 52 675 3777  
**Finland** +41 52 675 3777  
**Hong Kong** 400 820 5835  
**Japan** 81 (3) 6714 3086  
**Middle East, Asia, and North Africa** +41 52 675 3777  
**People's Republic of China** 400 820 5835  
**Republic of Korea** +822 6917 5084, 822 6917 5080  
**Spain** 00800 2255 4835\*  
**Taiwan** 886 (2) 2656 6688

**Austria** 00800 2255 4835\*  
**Brazil** +55 (11) 3759 7627  
**Central Europe & Greece** +41 52 675 3777  
**France** 00800 2255 4835\*  
**India** 000 800 650 1835  
**Luxembourg** +41 52 675 3777  
**The Netherlands** 00800 2255 4835\*  
**Poland** +41 52 675 3777  
**Russia & CIS** +7 (495) 6647564  
**Sweden** 00800 2255 4835\*  
**United Kingdom & Ireland** 00800 2255 4835\*

**Balkans, Israel, South Africa and other ISE Countries** +41 52 675 3777  
**Canada** 1 800 833 9200  
**Denmark** +45 80 88 1401  
**Germany** 00800 2255 4835\*  
**Italy** 00800 2255 4835\*  
**Mexico, Central/South America & Caribbean** 52 (55) 56 04 50 90  
**Norway** 800 16098  
**Portugal** 80 08 12370  
**South Africa** +41 52 675 3777  
**Switzerland** 00800 2255 4835\*  
**USA** 1 800 833 9200

\* European toll-free number. If not accessible, call: +41 52 675 3777

**For Further Information.** Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit [www.tek.com](http://www.tek.com).

Copyright © Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.



04 May 2017 1PW-30594-0

