

Z-Matched Pick-off Tee PSPL5372 Datasheet



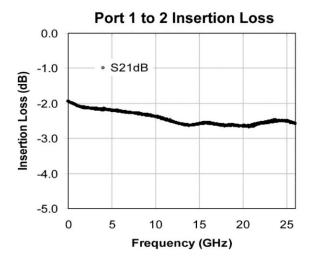
$$\begin{array}{c|c}
1 & 5.3\Omega & 5.3\Omega \\
\hline
183\Omega & 5.3\Omega & 6
\end{array}$$

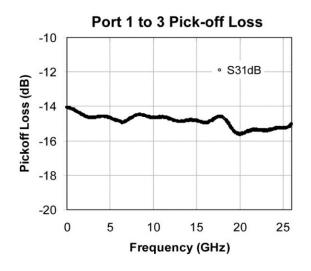
The PSPL5372 Z-Matched Pick-off Tee is an ultra-broadband resistive device that provides a scaled 5x (14 dB) pick-off of the input signal. The PSPL5372 exhibits excellent through-line impedance match to 50 ohms for frequencies from DC to 26 GHz, unlike conventional 14 dB pick-off tees that have DC resistance 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.

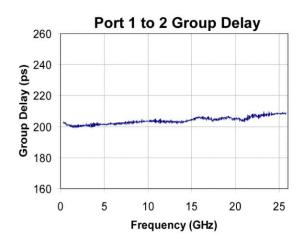
Key performance specifications

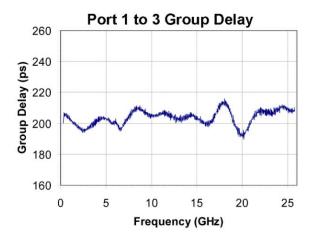
- **Excellent Through-Line Impedance Match**
- Minimizes Signal Reflections
- DC to 26 GHz
- 5x (14 dB) Pick-off

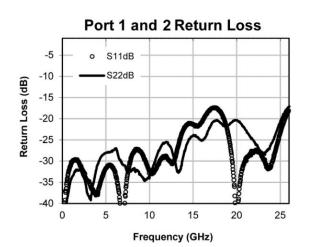
Typical performance

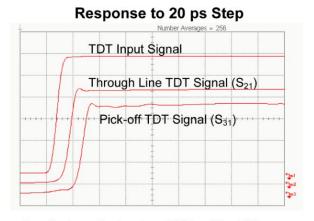










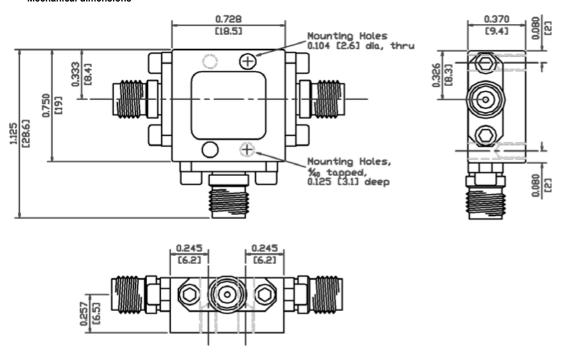


Amplitude scale: Input and S21 = 35 mV/div, S31 = 9 mV/div, Time scale = 50ps/div

Specifications

Parameter ¹	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



All parameters listed are typical unless max/min guaranteed limits are provided. The DC specs are valid only when used with $50~\Omega$ source and terminations.

Ordering information

Models

PSPL5372

Pick-Off Tee, 2 port Z-matched

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