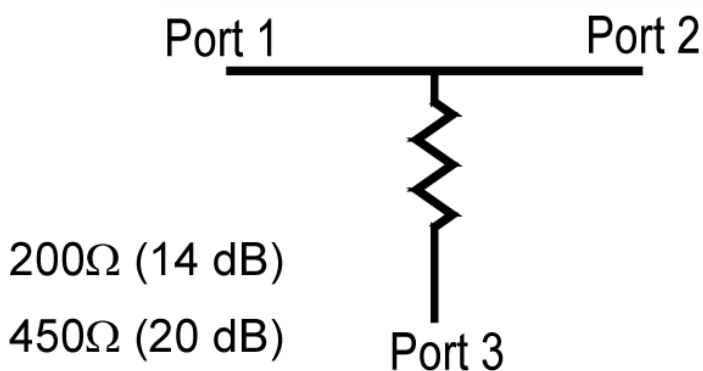
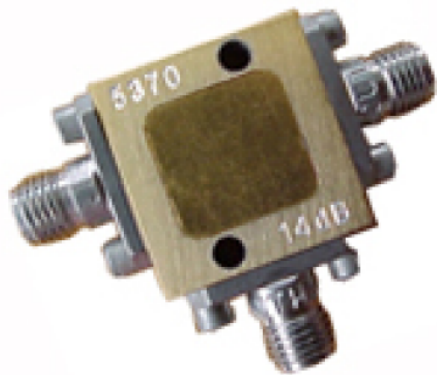


Ultra-Broadband Pick-off Tee

PSPL5370 Datasheet



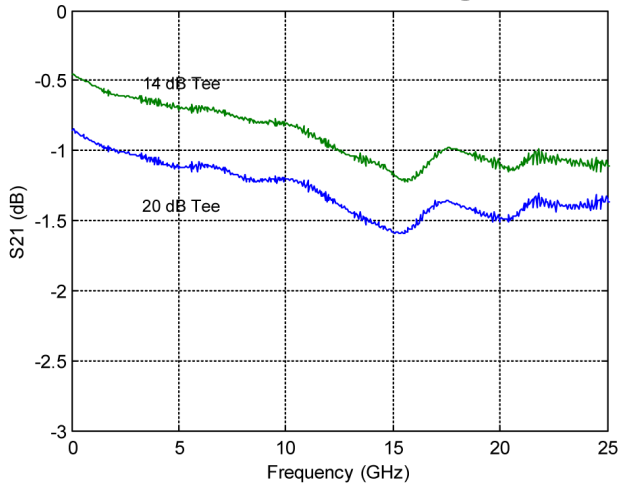
The PSPL5370 Pick-off Tee is an ultra-broadband resistive coupler, which provides a scaled (5x or 10x) replica of signals passing through the tee. The device exhibits excellent through-line insertion loss and pick-off ratio stability for frequencies from DC to >25 GHz. The PSPL5370 features good impedance match across a wide range of frequencies, with return loss typically >15 dB from 0-25 GHz.

Key performance specifications

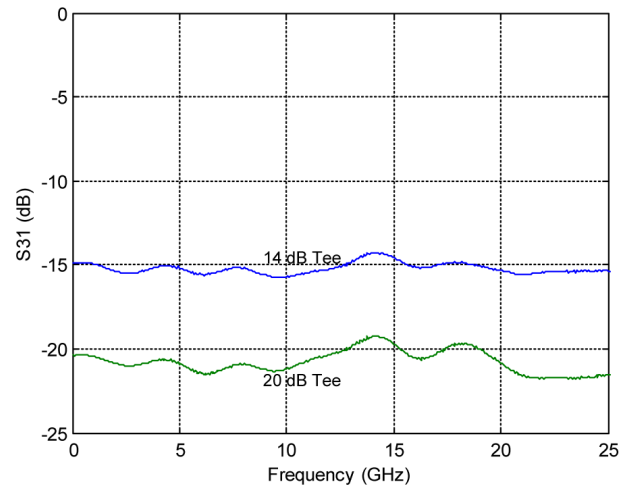
- Low insertion loss
- DC to >25 GHz
- 5x and 10x pick-offs
- ≤14 ps rise time

Typical performance

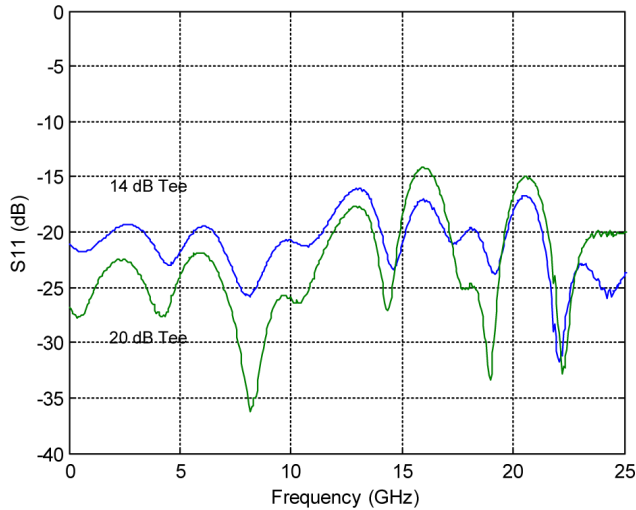
Insertion Loss, Through Path



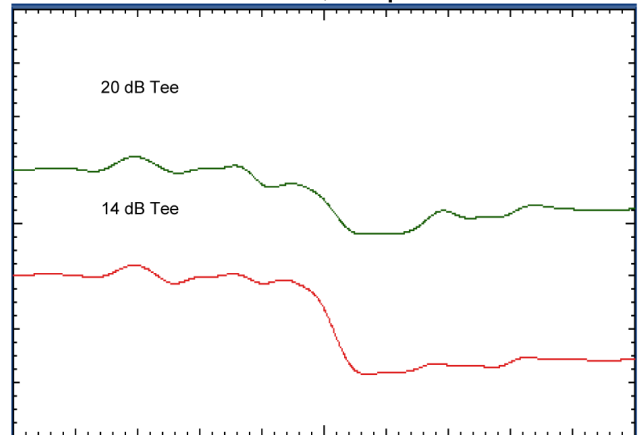
Insertion Loss, Pick-off Path



Return Loss, Ports 1 and 2

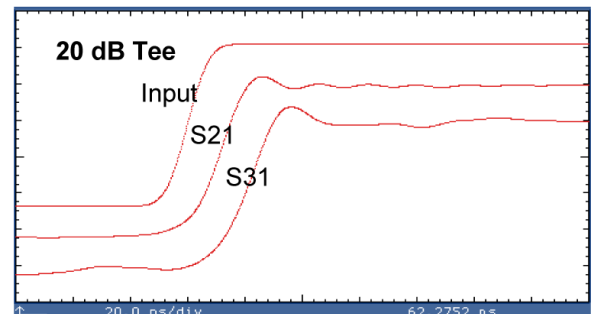
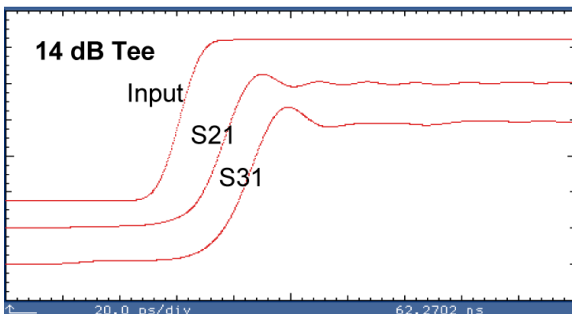


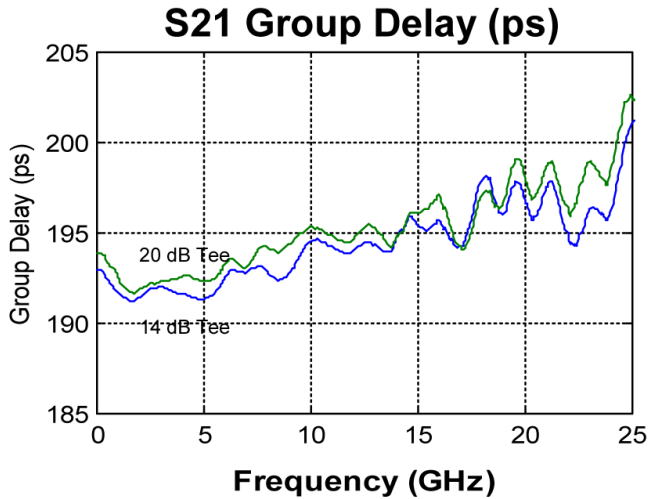
S11 Input TDR Response to 25 ps Rise time Pulse, Scale 5% p/div, Timebase, 50 ps/div



Transmission Responses to 15 ps rise time steps into Port 1.

Timebase 20 ps/div, Pick-off Transmission (S31) scaled 5x (10x for 20 dB Tee).



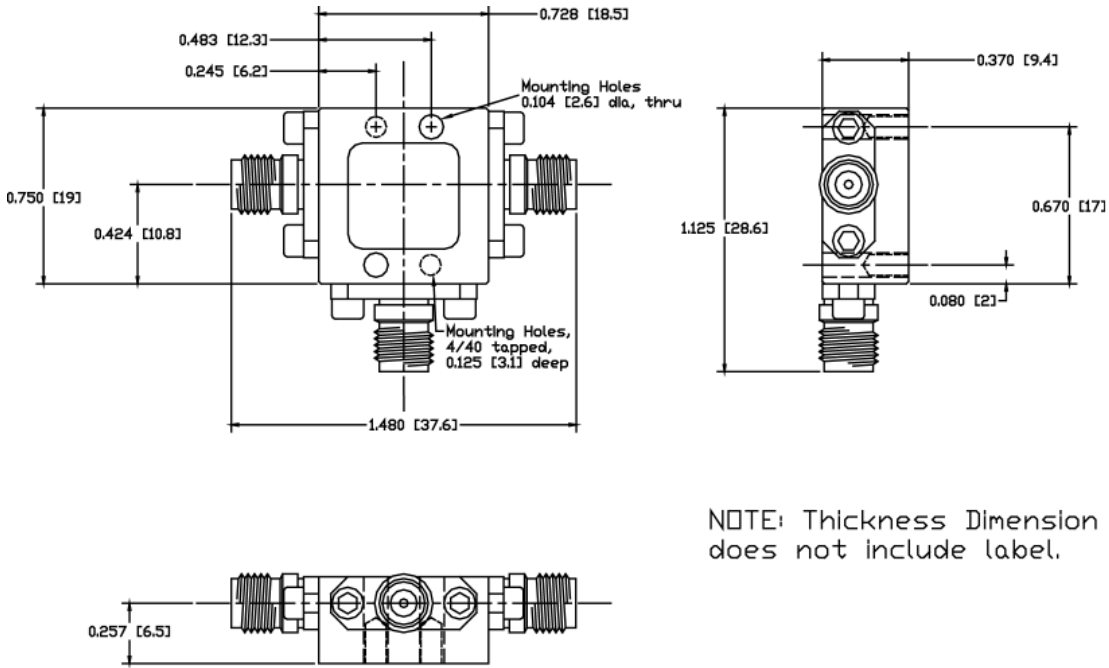


Specifications

Parameter ¹	PSPL5370 Opt. 14DB	PSPL5370 Opt. 20DB
Pick-off Insertion Loss (S31)	14.8 dB, nominal DC 15 ± 1 dB, 0-25 GHz, guaranteed	20.4 dB, nominal DC 20.5 ± 2.0 dB, 0-25 GHz, guaranteed
Through-line Insertion Loss (S21)	0.8 dB, nominal DC 0.8 (+0.2,-1.0) dB, 0-25 GHz, guaranteed	0.4 dB, nominal DC 0.4 (+0.2,-1.2) dB, 0-25 GHz, guaranteed
Rise time (10% - 90%)	12 ps	14 ps
Return Loss (S11)	>20 dB, DC ≥15 dB, 0-10 GHz, guaranteed ≥12.5 dB, 10-25 GHz, guaranteed	>24 dB, DC ≥20 dB, 0-10 GHz, guaranteed ≥13 dB, 10-25 GHz, guaranteed
Pick-off Resistor	200 Ω ± 2%, guaranteed	450 Ω ± 2%, guaranteed
Through-line Group Delay Tolerance (S21)	± 7.5 ps guaranteed up to 25 GHz (750 MHz aperture)	
In/Out Impedance @ DC (port 1 or port 2)	41.7 Ω, nominal	45.5 Ω, nominal
Temperature Range	-55 to +90 °C Operating	
Max Input Power, (Port 1 or 2, Avg)	2 W	4 W
Connectors	SMA jacks (f)	SMA jacks (f)
Warranty	One Year	

¹ 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.

Mechanical dimensions



NOTE: Thickness Dimension does not include label.

Ordering information

Models

PSPL5370 Pick-off Tee

Options

Opt. 14DB 14 dB Pick-off

Opt. 20DB 20 dB Pick-off

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Belgium 00800 2255 4835*
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Finland +41 52 675 3777
Hong Kong 400 820 5835
Japan 81 (3) 6714 3010
Middle East, Asia, and North Africa +41 52 675 3777
People's Republic of China 400 820 5835
Republic of Korea 001 800 8255 2835
Spain 00800 2255 4835*
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* European toll-free number. If not accessible, call: +41 52 675 3777

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