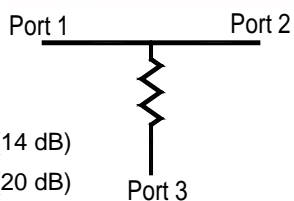


Ultra-Broadband Pick-off Tee

PSPL5370 Datasheet



The PSPL5370 Pickoff 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 pickoff 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.



200Ω (14 dB)
450Ω (20 dB)

- Low insertion loss
- DC to >25 GHz
- 5x and 10x pickoffs
- ≤14 ps risetime

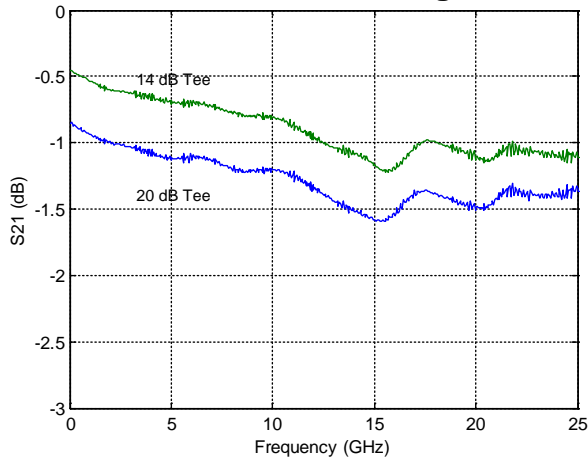
Specifications

Parameter	PSPL5370 option 14DB	PSPL5370 option 20DB
Pickoff 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
Risetime (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
Pickoff Resistor	200±2% Ω, guaranteed	450±2% Ω, 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
Warranty	One Year	

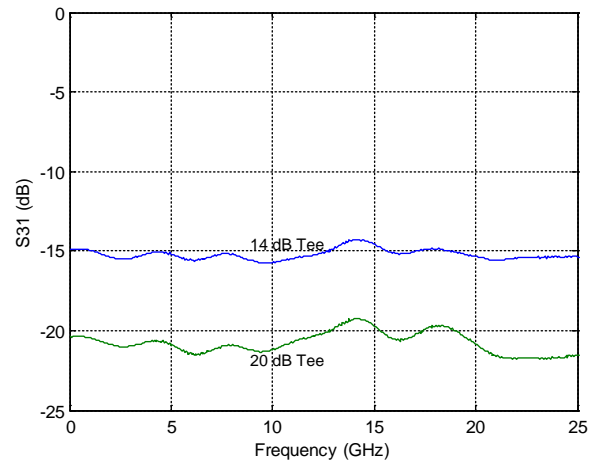
Notes: All parameters listed are typical unless max/min guaranteed limits are provided. The DC specs are valid only when used with 50Ω source and terminations.

Typical Performance

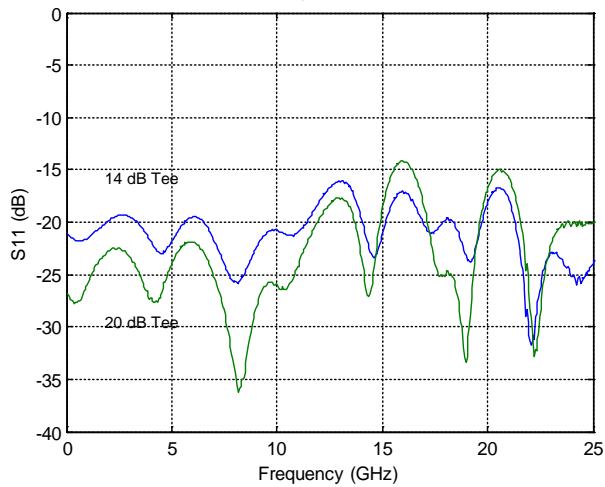
Insertion Loss, Through Path



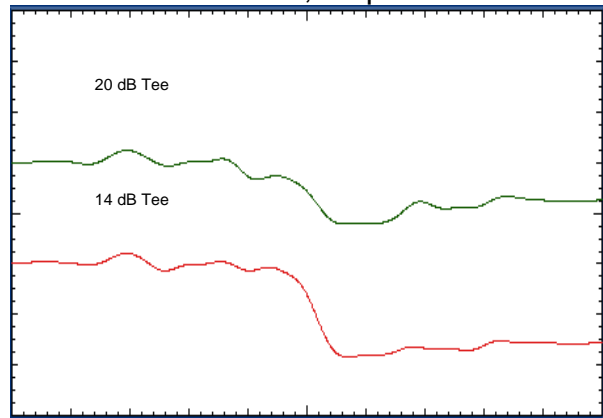
Insertion Loss, Pick-off Path



Return Loss, Ports 1 and 2

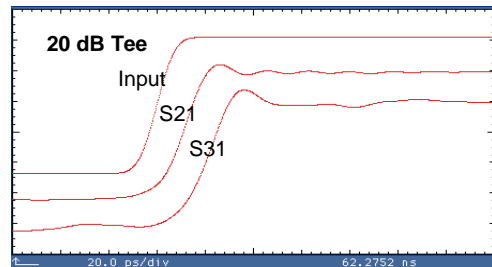
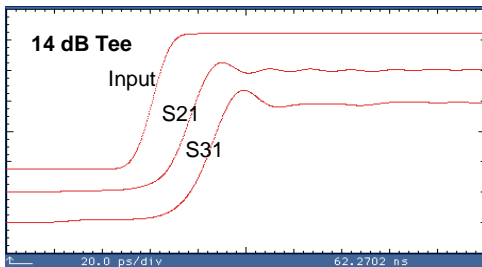


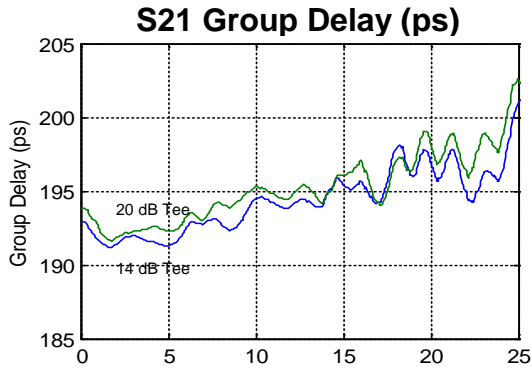
S11 Input TDR Response to 25 ps Risetime Pulse, Scale 5% p/div, Timebase, 50 ps/div



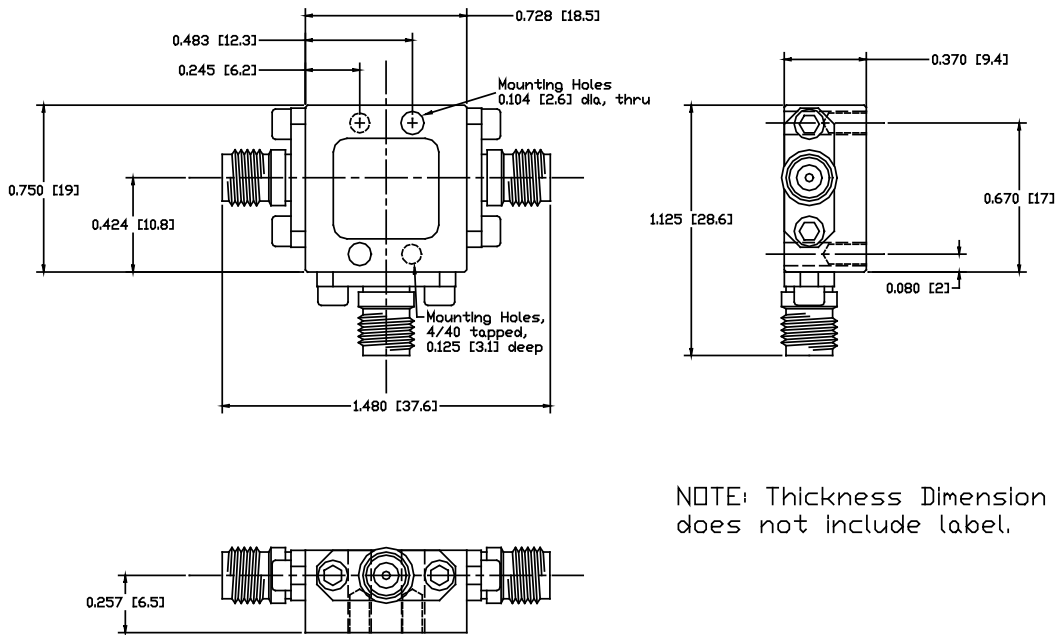
Transmission Responses to 15 ps risetime steps into Port 1.

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





PSPL5370 Mechanical dimensions



NOTE: Thickness Dimension does not include label.

Ordering information

Model	Description
PSPL5370	Pick-Off Tee, 14dB, 5x

Options

- Opt. 14DB 14dB Pick-Off
- Opt. 20DB 20dB Pick-Off

PSPL5370 Ultra-broadband Pick-Off Tee

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