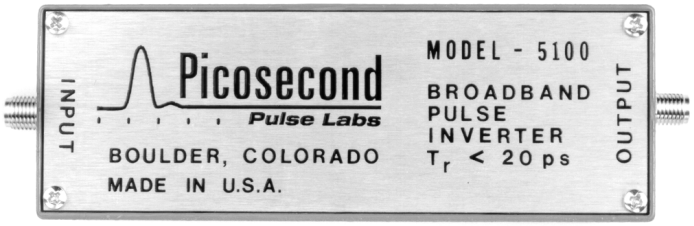
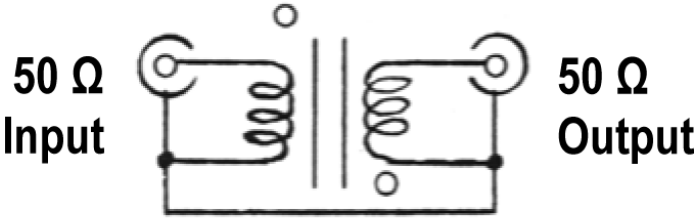
Inverting Transformer

PSPL5100 Datasheet

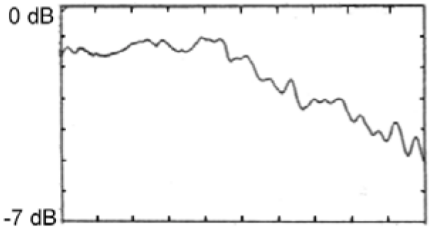




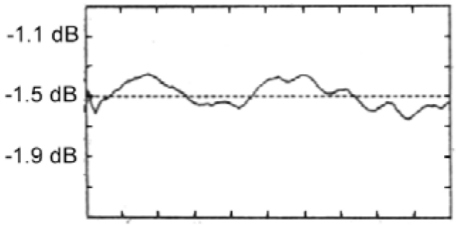
The PSPL5100 Inverting Transformer rise time is 15 ps with a -3 dB bandwidth from 200 kHz to 23 GHz. It passes fast rise time pulses with a minimum of waveform distortion. A flat top pulse passing through the inverter has less than 2% sag in 15 ns. The PSPL5100 can also be used for RF and microwave applications.

Typical performance

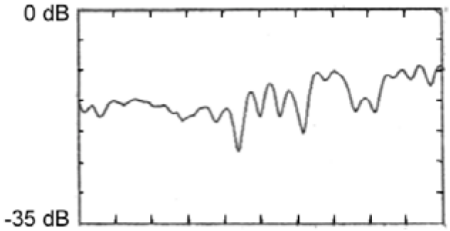
Insertion Loss
1 dB/div and 2 GHz/div



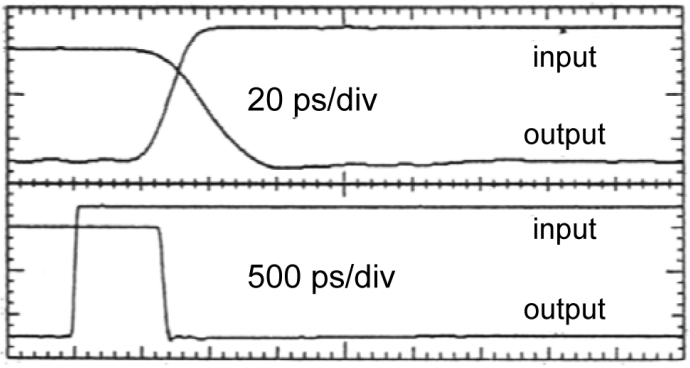
Mid-band Insertion Loss
0.01 – 2 GHz
0.2 dB/div and 200 MHz/div



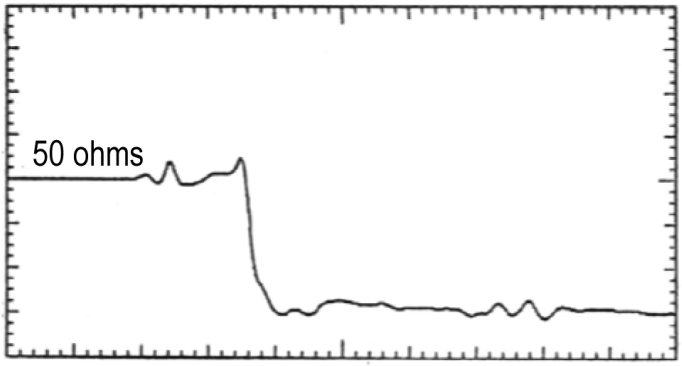
Return Loss
5 dB/div and 2 GHz/div



Transmission Response
to 10 ps rise time input step
20 ps/div and 500 ps/div



35 ps TDR
5% rho/div and 100 ps/div



Specifications

Parameter [1]	Value
Rise time (10%-90%)	15 ps, < 20 ps max.
Bandwidth (-3 dB)	>20 GHz
Low Frequency Cutoff	200 kHz (-3 dB)
Insertion Loss	1.5 ±0.5 dB, 0.01 < f < 4 GHz
Impedance	50 Ω
Refl. Coeff. (35 ps TDR)	-15% rho
Return Loss (f < 6 GHz)	>16 dB, >12 dB min
Delay	0.6 ns
Sag Time Constant	800 ns (1/e)
Core Saturation	-50% @ 500 mA DC
Inductance	20 µH
Max. Power	10 W average
Turns Ratio	1:1
Connectors	SMA jacks (f)
Weight	5 oz. (142 g)
Dimensions	4.8 in x 1.5 in x 1.1 in (12.2 cm x 3.8 cm x 2.8 cm)
Warranty	One year

1 All parameters listed are typical unless max/min guaranteed limits are provided. Measurements made with 50 Ω matched line/load at output ports

Ordering information

Models

PSPL5100	Inverting Transformer

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

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