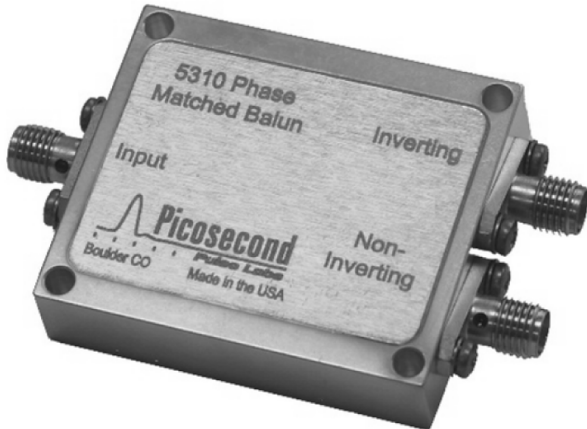


# Phase-Matched Balun

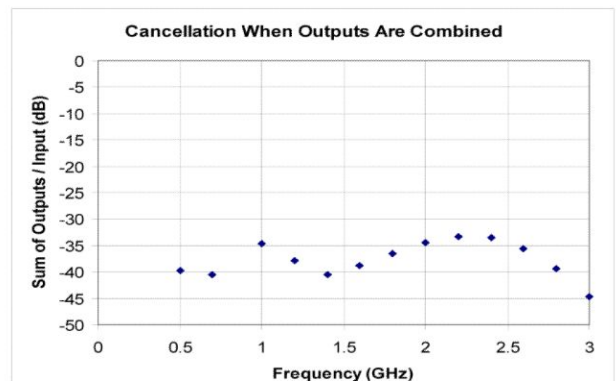
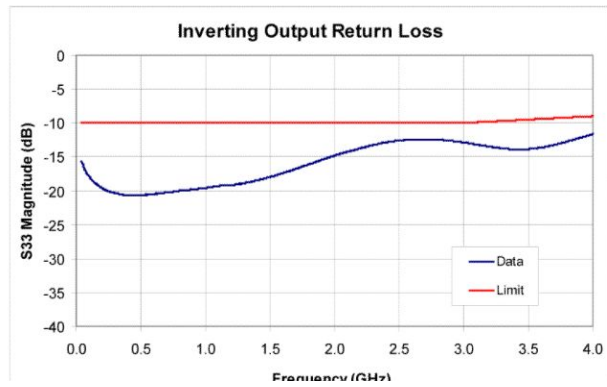
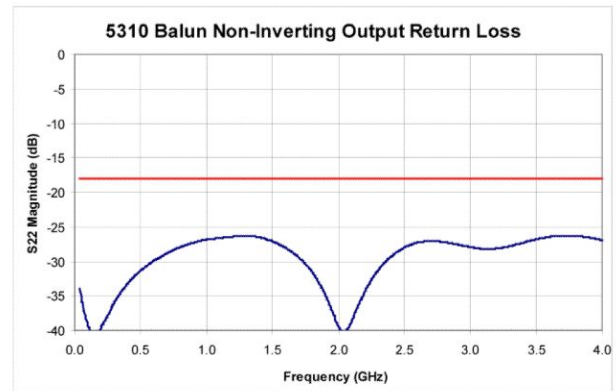
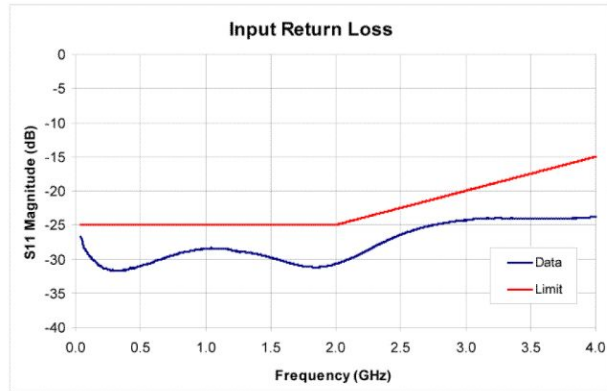
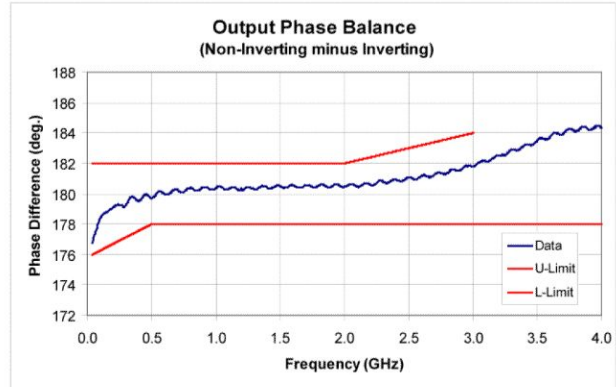
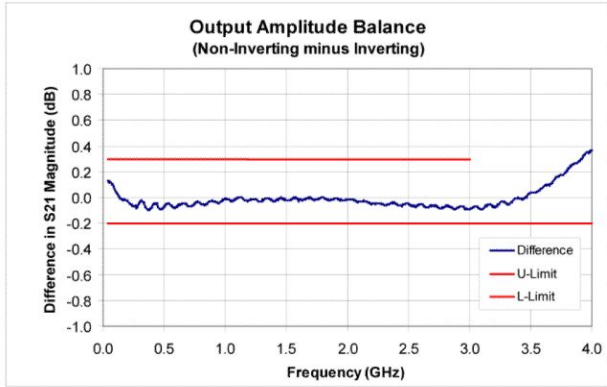
## PSPL5310R Datasheet



### Key performance specifications

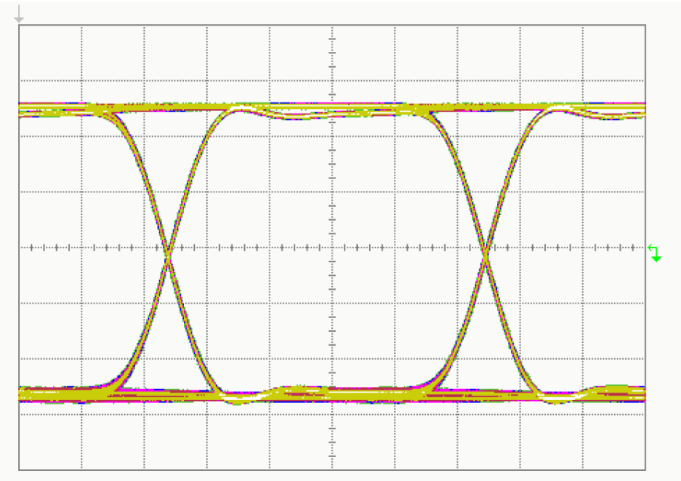
- Excellent Phase and Amplitude Balance from 100 MHz to 4 GHz
- Operating range 4 MHz to 6.5 GHz
- Designed for use with ADCs
- Maximum input power > +20 dBm

## Typical performance



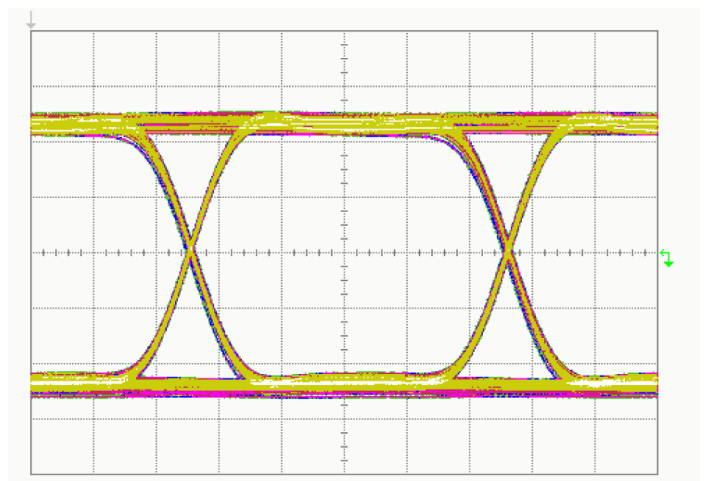
### Input

Amplitude scale = 100mv/div,  
Time Scale = 100ps/div



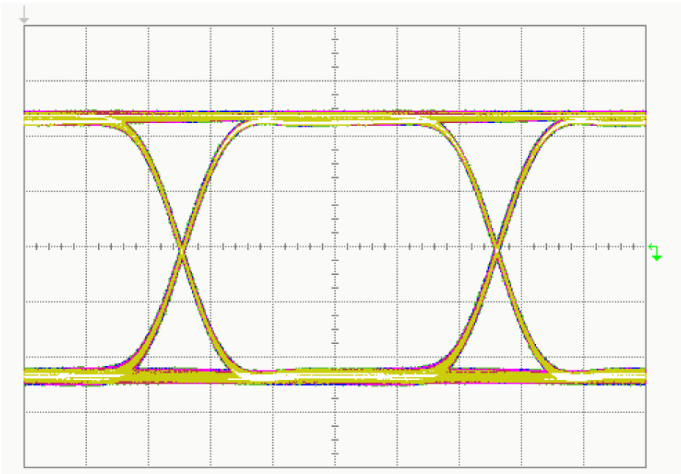
### Inverting Output

Amplitude scale = 50mv/div,  
Time Scale = 100ps/div



### Non-Inverting Output

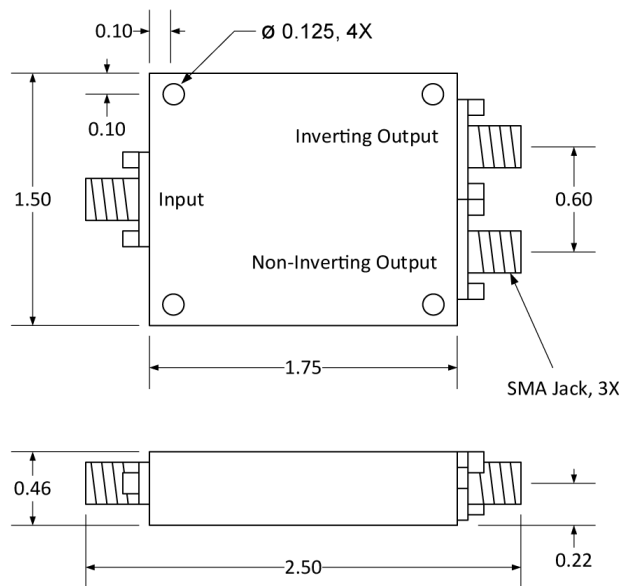
Amplitude scale = 50mv/div,  
Time Scale = 100ps/div



# Specifications

Parameter	Test Condition	Minimum	Typical	Maximum
Risetime	10% to 90%		54 ps	
Bandwidth	-3 dB		6.5 GHz	
Low Frequency Cutoff	-3 dB		4 MHz	
Insertion Loss	100 MHz 1 GHz 2 GHz 3 GHz		6.9 dB 6.9 dB 7.1 dB 7.6 dB	7.1 dB 7.3 dB 7.7 dB 8.1 dB
Impedance			50 Ohms	
Return Loss	100 MHz – 2GHz		-30 dB	-25 dB
Input			-30 dB	-18 dB
Non-Inverting Output			-15 dB	-10 dB
Inverting Output				
Delay			320 ps	
Differential Amplitude Balance	100 MHz – 3.0 GHz		±0.1 dB	+0.3 dB -0.2 dB
Differential Phase Balance	500 MHz – 2.0 GHz		±0.5 degree	±2 degrees
Maximum Input	100MHz	+20dBm		
Connectors	SMA jacks (f)			
Weight	1.4 oz. (40 grams)			
Operating Temperature	0C to +70C			
Storage Temperature	-40C to +125C			
Warranty	One Year			

## Mechanical dimensions



Not drawn to scale  
Dimensions in inches

## Ordering information

### Models

PSPL5310R

Phase-Matched Balun

**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 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\*  
**Taiwan** 886 (2) 2722 9622

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**India** 000 800 650 1835  
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**Denmark** +45 80 88 1401  
**Germany** 00800 2255 4835\*  
**Italy** 00800 2255 4835\*  
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**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

Updated 10 April 2013

**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.tektronix.com](http://www.tektronix.com).

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