

# Phase-Matched Balun

## PSPL5310R Datasheet

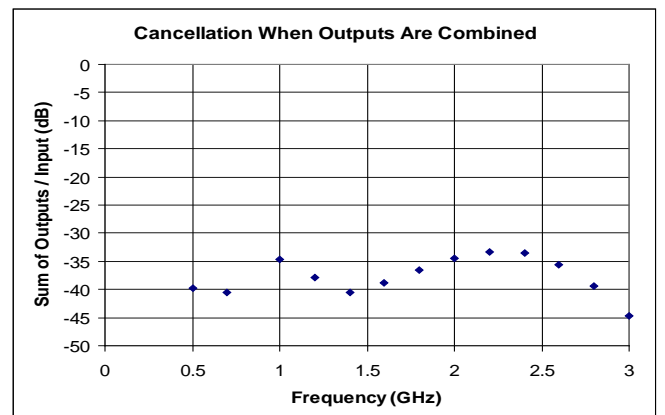
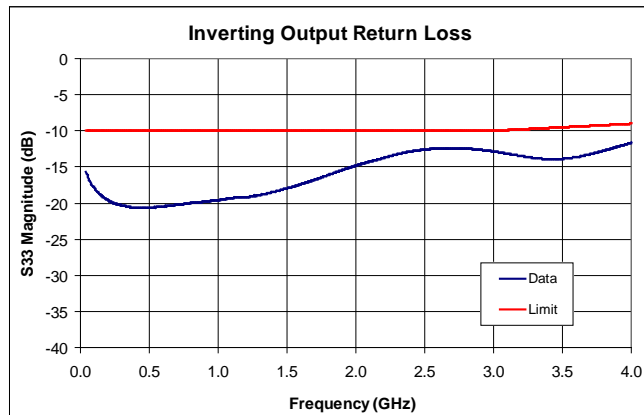
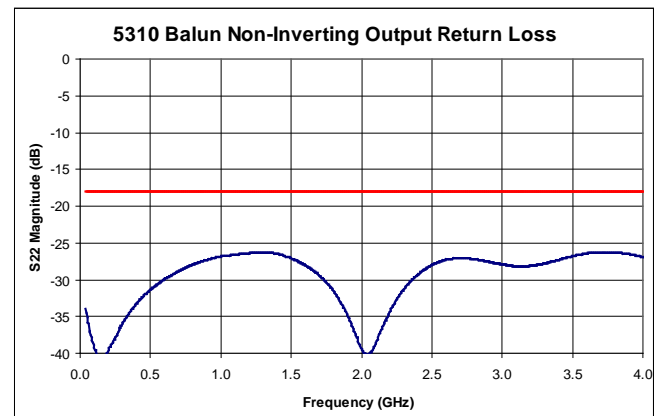
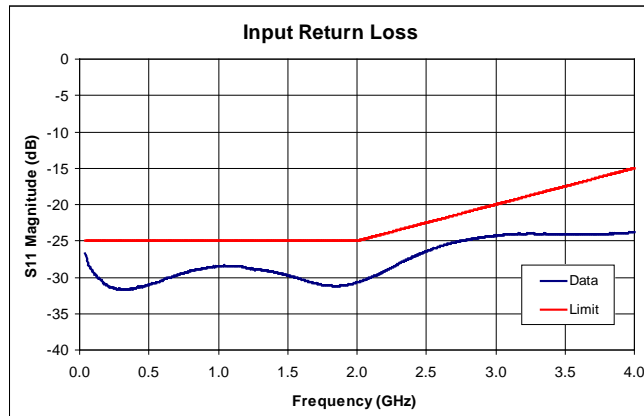
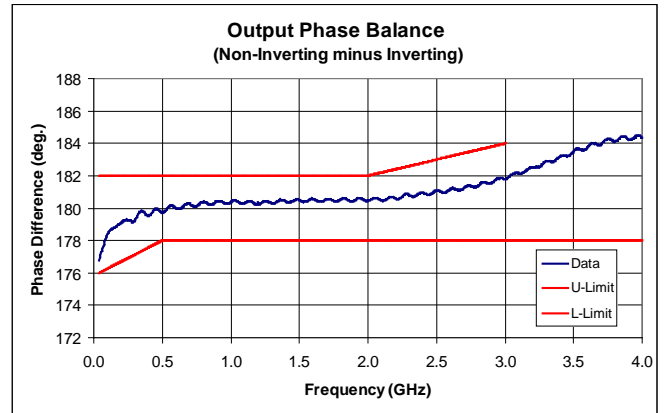
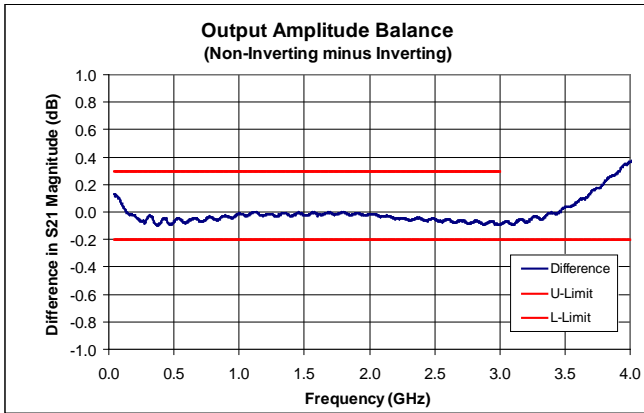
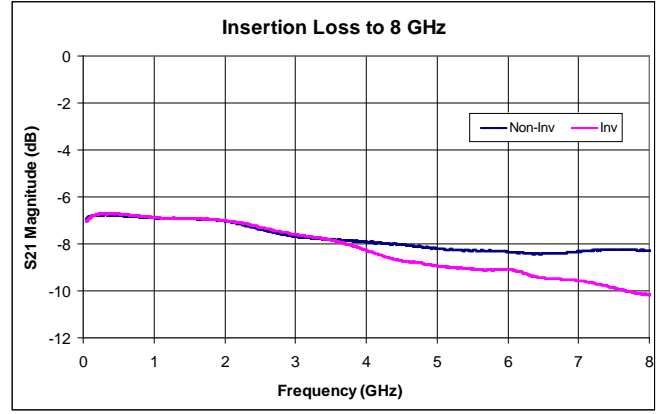
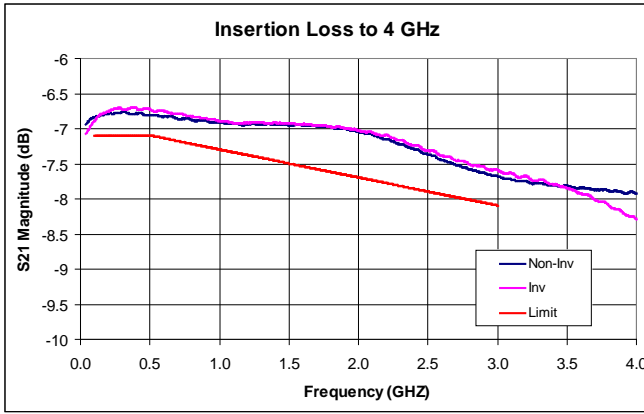


- Excellent Phase and Amplitude Balance from 100 MHz to 4 GHz
- Operating range 4 MHz to 6.5 GHz
- Designed for use with ADCs
- Maximum input power > +20 dBm

### 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				
Input	100 MHz – 2GHz		-30 dB	-25 dB
Non-Inverting Output			-30 dB	-18 dB
Inverting Output			-15 dB	-10 dB
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			

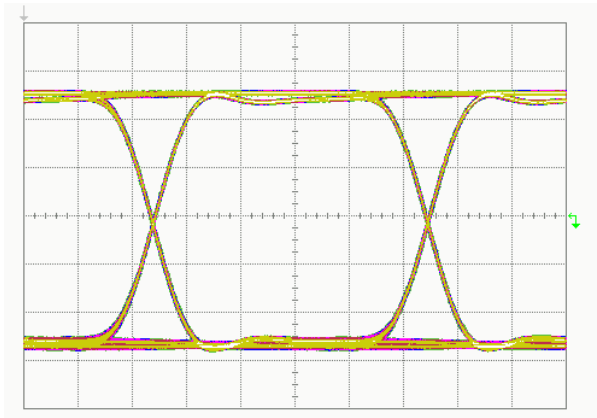
Typical Performance



## Response to 2Gb/s NRZ signal with 2<sup>7</sup>-1 PRBS pattern

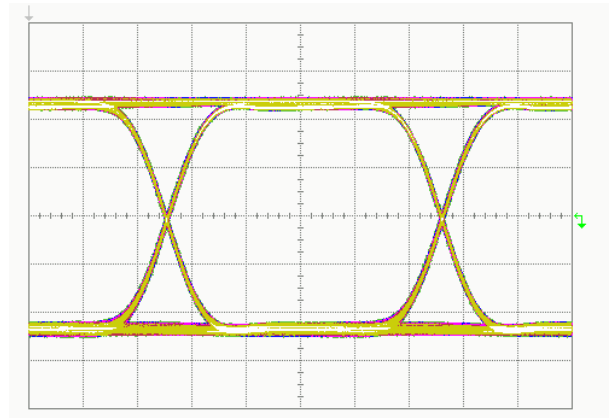
### Input

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

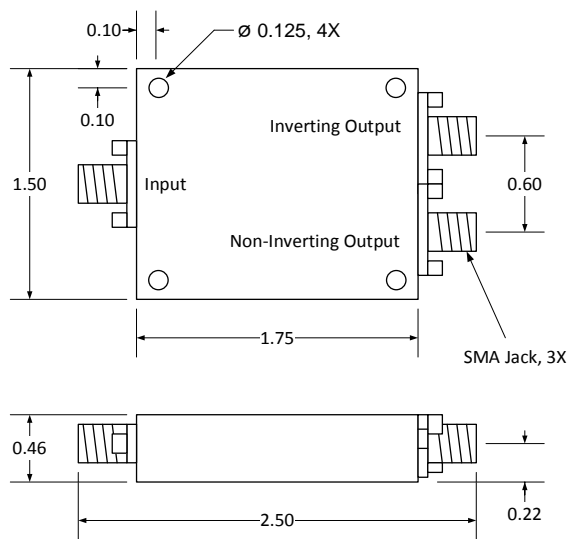


### Non-Inverting Output

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



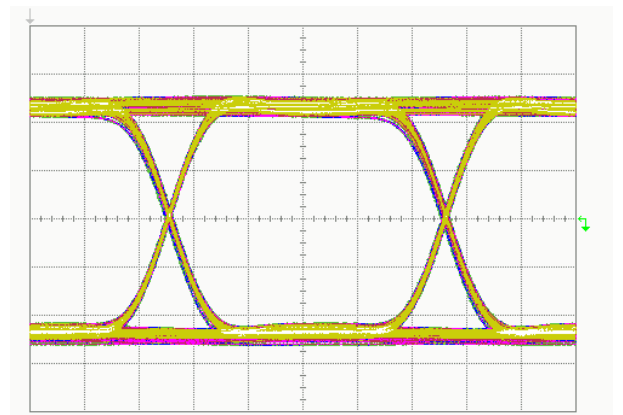
## PSPL5310R Mechanical dimensions



Not drawn to scale  
Dimensions in inches

### Inverting Output

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



## Ordering information

Model	Description
PSPL5310R	Phase-Matched Balun

# 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

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

Austria 00800 2255 4835\*

Brazil +55 (11) 3759 7627

Central Europe & Greece +41 52 675 3777

France 00800 2255 4835\*

India 000 800 650 1835

Luxembourg +41 52 675 3777

The Netherlands 00800 2255 4835\*

Poland +41 52 675 3777

Russia & CIS +7 (495) 6647564

Sweden 00800 2255 4835\*

United Kingdom & Ireland 00800 2255 4835\*

Balkans, Israel, South Africa and other ISE Countries +41 52 675 3777

Canada 1 800 833 9200

Denmark +45 80 88 1401

Germany 00800 2255 4835\*

Italy 00800 2255 4835\*

Mexico, Central/South America & Caribbean 52 (55) 56 04 50 90

Norway 800 16098

Portugal 80 08 12370

South Africa +41 52 675 3777

Switzerland 00800 2255 4835\*

USA 1 800 833 9200

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