## Tektronix<sup>®</sup>

# Ultra-Broadband DC Block

### PSPL5509 Datasheet



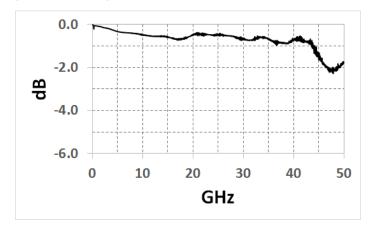
The PSPL5509 DC Block is an ultra-broadband inner conductor DC block with a flat frequency response over many decades up to 50 GHz. It is available in a choice of 2.92 mm or 2.4 mm connectors.

#### Key performance specifications

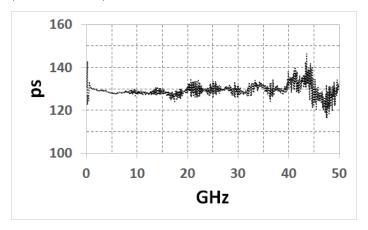
- 7 kHz to 50 GHz Bandwidth
- 5 ps Rise time
- 1 dB Insertion Loss to 40 GHz

### **Typical performance**

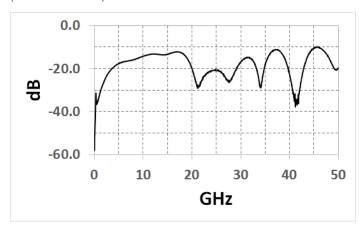
The following figure shows the Insertion Loss from 40 MHz to 50 GHz (2.4 mm connectors).



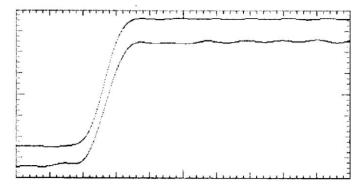
The following figure shows the Group Delay from 40 MHz to 50 GHz (2.4 mm connectors).



The following figure shows the Return Loss from 40 MHz to 50 GHz (2.4 mm connectors).



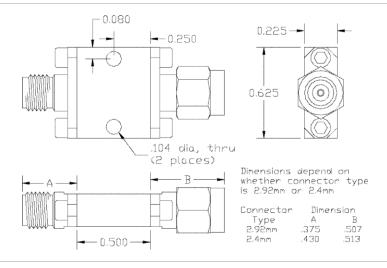
The following figure shows the step response to a 15 ps rise time input at 10 ps/div.



# **Specifications**

Parameter <sup>1</sup>	Description
Capacitance	0.22 μF
Voltage	16 V maximum
Insertion Loss (all connector types) (2.4 mm only)	<1 dB typical, f < 40 GHz 2 dB maximum at 40 GHz 3 dB maximum at 50 GHz
Low Frequency (-3 dB)	7 kHz
Rise time (10% - 90%)	5.1 ps
Delay	126 ps
Impedance	50 Ω
Return Loss	See Typical performance
Dimensions 2.92 mm 2.4 mm	35.1 x 15.9 x 7.9 mm 36.7 x 15.9 x 7.9 mm
Warranty	One year

#### **Mechanical dimensions**



<sup>1</sup> Parameters listed are typical values. The maximum and minimum limits for insertion loss are guaranteed.

# Ordering information

#### **Models**

PSPL5509 DC Block

## **Options**

Two options are required, a voltage option and a connector option.

PSPL5509 16V 16 V blocking voltage

PSPL5509 240JP 2.4 mm connectors jack (f) & plug (m)

PSPL5509 292JP 2.92 mm connectors jack (f) & plug (m)

#### **Datasheet**

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 3086
Middle East, Asia, and North Africa +41 52 675 3777
People's Republic of China 400 820 5835
Republic of Korea +822 6917 5084, 822 6917 5080
Spain 00800 2255 4835\*
Taiwan 886 (2) 2656 6688

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
Demmark -45 80 88 1401
Germany 00800 2255 4835\*
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Norway 800 16098

Norway 800 16098 Portugal 80 08 12370 South Africa +41 52 675 3777 Switzerland 00800 2255 4835\* USA 1 800 833 9200

 $^{\star}$  European toll-free number. If not accessible, call: +41 52 675 3777

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