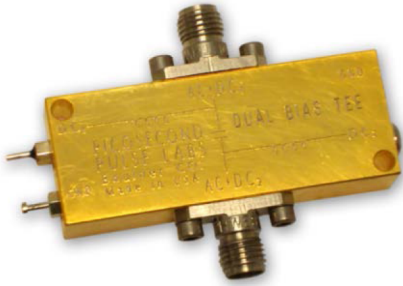


100 V Bias Tee

PSPL5544 Datasheet



The PSPL5544 is an ultra-broadband, high-current, coaxial bias insertion tee and DC blocking capacitor. The high DC blocking voltage (100 V) and high bias current capability (2 A) make it an excellent choice for broadband measurements of power devices and circuits.

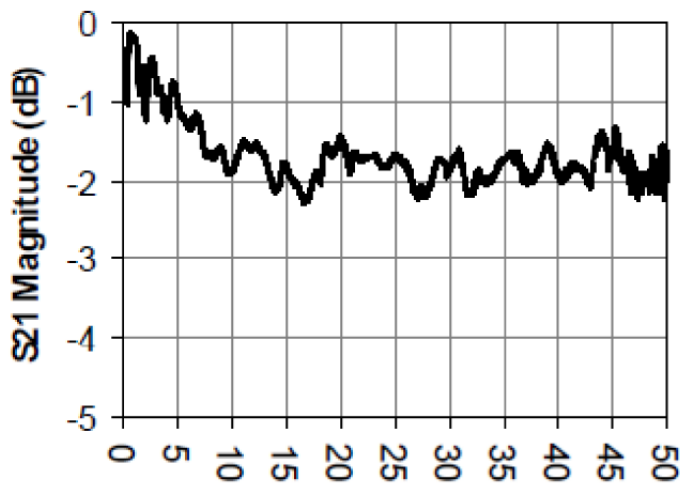
Key performance specifications

- 50 kHz to 40 GHz
- 8 ps rise time
- 100 V, 2 A

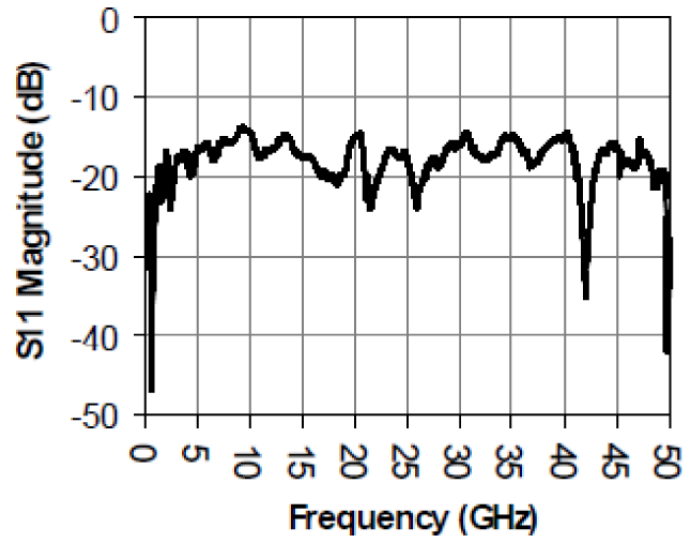
Typical performance

The following figures show the linear sweep from 40 MHz to 50 GHz. The AC connector is the input (port 1) and the AC + DC connector is the output (port 2).

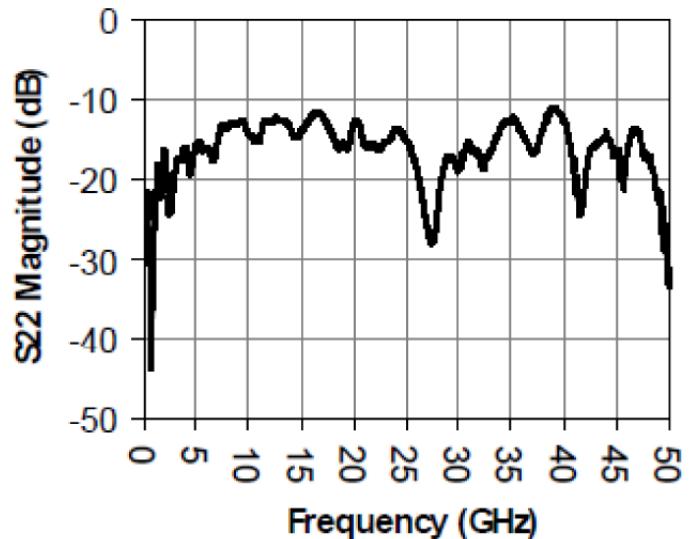
The following figure shows the S21 insertion loss.



The following figure shows the S11 return loss.



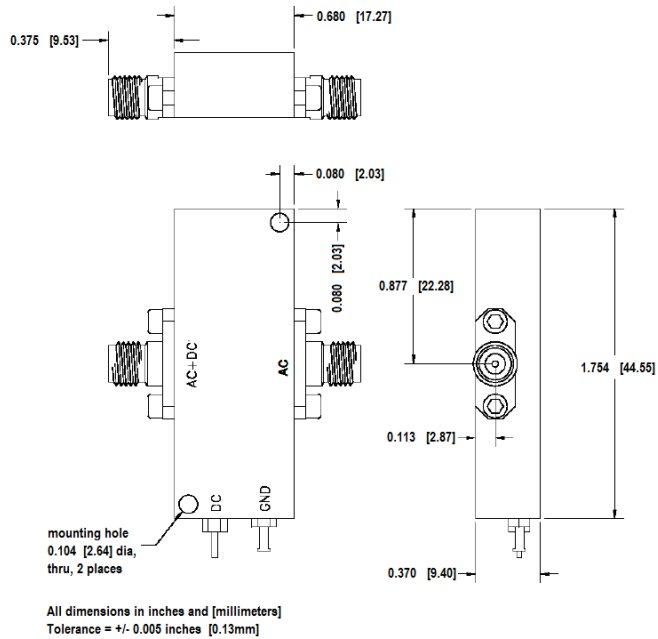
The following figure shows the S22 return loss.



Specifications

Parameter	Symbol	Units	Minimum ¹	Typical	Maximum ¹	Comments
Impedance	Z	ohms		50		
Upper 3 dB frequency	$f_{c,h}$	GHz	40			
Lower 3 dB frequency	$f_{c,l}$	kHz		50		
Rise time	t_r	ps		8		10 – 90%
Insertion loss	S_{21}	dB		See plot	3	Measured with open on DC port.
Input (AC), Return Loss	S_{11}	dB	10	See plot		
Output (AC+DC), Return Loss	S_{22}	dB	8	See plot		
DC voltage	V	V			100	
DC current	I	A			2	
Capacitance	C	μ F		0.2		
Inductance	L	μ H		100		
Resistance	R	ohms		0.5		
CW RF power	P	W			10	
Isolation	S_{13}	dB		> 35		f > 100 MHz
DC path bandwidth	$f_{c,DC}$	kHz		42		
RF connectors	2.92 mm jacks (f)					
Warranty	One year					

Mechanical dimensions



¹ *Maximum and minimum values are based on manufacturing test limits at 25 °C.

Ordering information

Models

PSPL5544 BIAS TEE, 100 V, 2 A

Options

PSPL5544 292JJ 2.92 mm connectors (f) on the AC and AC + DC ports, solder connection on the DC port

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
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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

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USA 1 800 833 9200

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

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