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Find the *Tektronix / Picosecond Pulse Labs 5550B-104* at our website: *Click HERE*

Model 5550B
Bias Tee
Product Specification

The Model 5550B is a very broadband coaxial bias insertion tee and DC blocking capacitor designed to pass fast rise pulses with minimum waveform distortion. The risetime is 20 ps with a -3 dB bandwidth extending from 100 kHz to 18 GHz. The 5550B will safely carry 500 mA of DC current. However, core saturation limits the low frequency response at DC currents above 50 mA. See Notes [1-3].



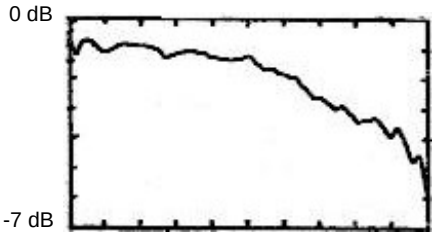
Risetime (10%-90%)	20 ps, 25 ps max.
Bandwidth (-3 dB)	18 GHz, 14 GHz min.
Low Frequency (-3 dB)	100 kHz
Insertion Loss (0.01 – 4 GHz)	0.9 dB, ± 0.5 dB
Impedance	50 Ω
Refl. Coefficient (35 ps TDR) (AC Port)	+8%, t < 100 ps -12%, t > 100 ps
Return Loss (AC Port)	0.1 < f < 2 GHz RL >15 dB – 2 dB/GHz * f (GHz) 2 < f < 15 GHz RL > 11 dB – 0.4 dB/GHz * f (GHz)
Isolation (AC – DC)	> 30 dB
Capacitance	0.02 µF ± 20%
DC Voltage	50 V max.
Inductance	1 mH, ± 30 %
DC Current	500 mA max.
DC Resistance	0.4 Ω
CW RF Power	2.5 W max.
DC Path Bandwidth	16 kHz typical
Connectors	SMA jacks (f)
Core Saturation Current < 50 mA 150 mA 500 mA	**-3 dB low freq.** <100 kHz 160 KHz 350 kHz
Dimensions	1.95" x 0.5" x 1.82" (5 x 1.3 x 4.6 cm)
Warranty	One year. See Terms and Conditions of Sale for details

Notes
[1] Parameters listed are typical values. They are guaranteed only when maximum and / or minimum limits are given.
[2] 10 ps risetime step responses and TDR waveform measured using a PSPL Model 4015B pulse generator and an HP-54124A, 50 GHz, 9.4 ps digital sampling oscilloscope.
[3] Frequency response measured using a Wiltron 5447A, 10 MHz - 20 GHz network analyzer.

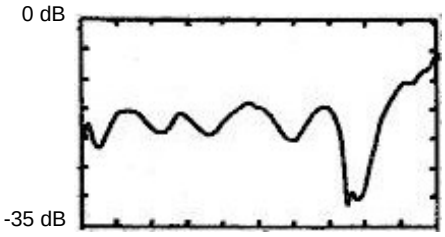
Ordering Information

Model Number
5550B-104

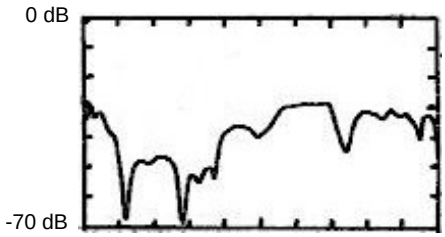
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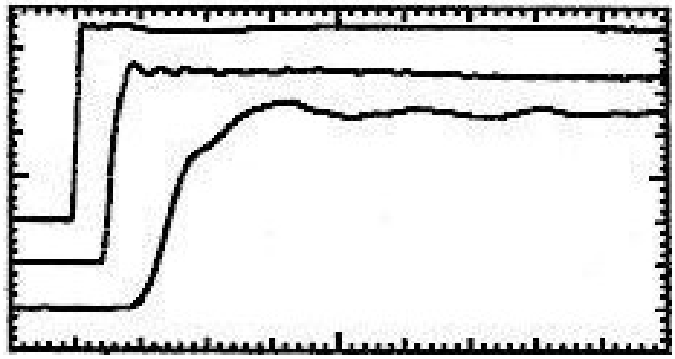
1 dB/div and 2 GHz/div
Insertion Loss



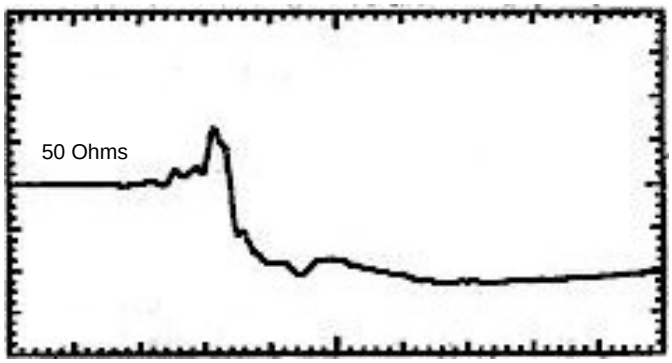
5 dB/div and 2 GHz/div
Return Loss



10 dB/div and 2 GHz/div
Isolation (AC-DC)

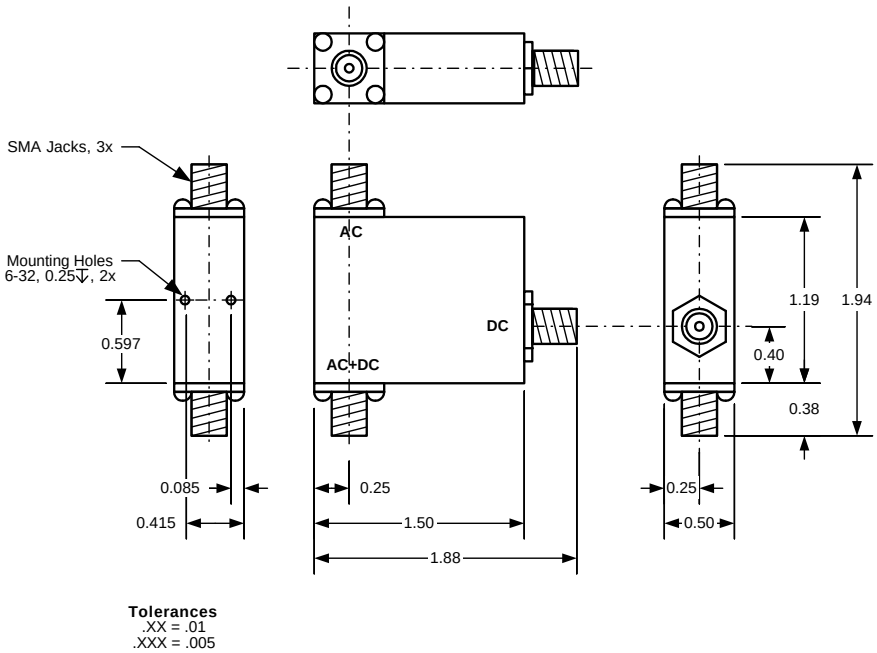


20%/div
Top to bottom: 500 ps/div, 100 ps/div, and 20 ps/div
10 ps Step Response



5% rho/div and 200 ps/div
35 ps TDR of AC port

5550B Mechanical Drawing



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