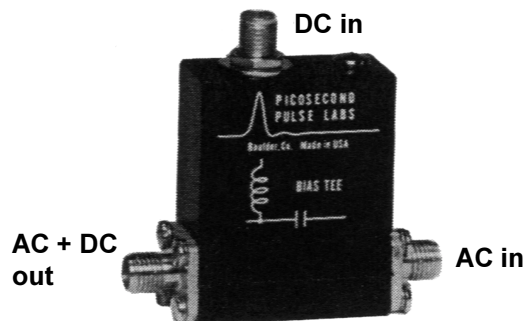


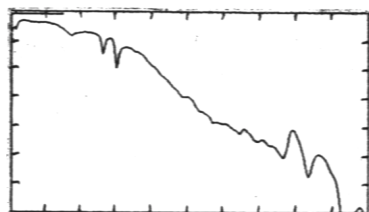


Model 5575A Bias Tee

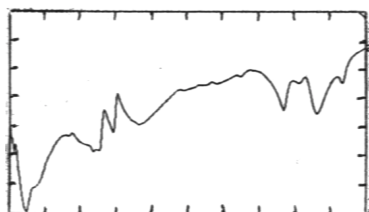
The Model 5575A is a broadband coaxial bias insertion tee and DC blocking capacitor designed to pass fast rise pulses with minimum waveform distortion. The risetime is 30 ps with a -3 dB bandwidth extending from 10 kHz to 12 GHz. The 5575A will safely carry 500 mA of DC current. However, core saturation limits the low frequency response at DC currents above 20 mA. See Notes [1-3].



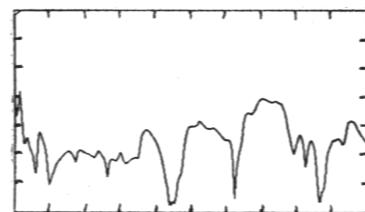
Risetime (10%-90%) [2]	30 ps, 35 ps max.	DC Voltage	50 V max.
Bandwidth (-3 dB) [3]	12 GHz, 10 GHz min.	Inductance	8 mH, $\pm 30\%$
Low Frequency (-3 dB)	10 kHz	Core Saturation: Current	-3dB low freq. < 10 kHz 100 mA 70 kHz 500 mA 300 kHz
Insertion Loss (0.01 – 3 GHz)	0.6 dB, ± 0.5 dB	DC Resistance	0.6 Ω
Impedance	50 Ω	CW RF Power	3.5 W max.
Refl. Coefficient (35 ps TDR)	$\pm 5\%$, $t < 100$ ps, -6% , $t > 100$ ps	Connectors	SMA jacks (f)
DC Current	500 mA max.	Capacitance	0.22 μ F, -50%, +80%
Isolation (AC-DC)	> 30 dB	Dimensions	1.95" x 0.5" x 1.82" (5 x 1.3 x 4.6 cm)
Return Loss [3]	0.1 < f < 10 GHz RL > 18 dB - 1.2 dB/GHz * f (GHz)	Warranty	One year. See Terms and Conditions of Sale for details



1 dB/div and 2 GHz/div
Insertion Loss



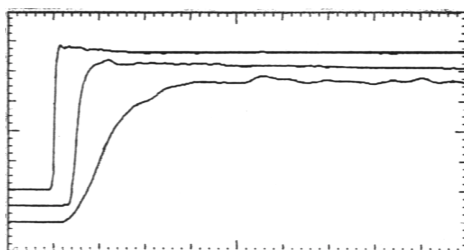
5 dB/div and 2 GHz/div
Return Loss



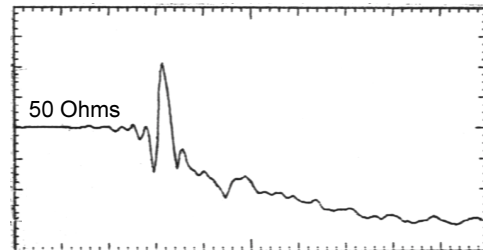
10 dB/div and 2 GHz/div
Isolation (AC-DC)

Ordering Information

Model Number
5575A-104



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



2.5% rho/div and 200 ps/div
35 ps TDR of AC port

Notes

[1] Parameters listed are typical values. They are guaranteed only when maximum and / or minimum limits are given.

[2] 10 ps risetime step response 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.