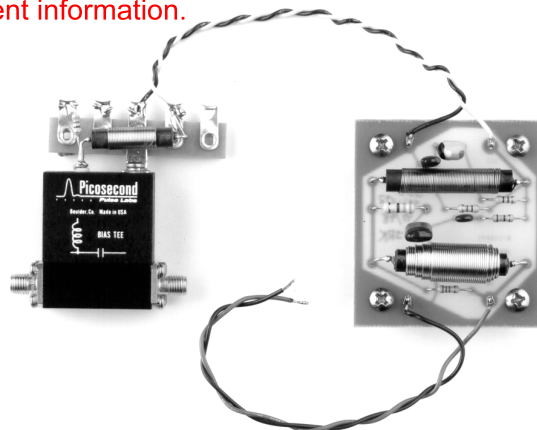
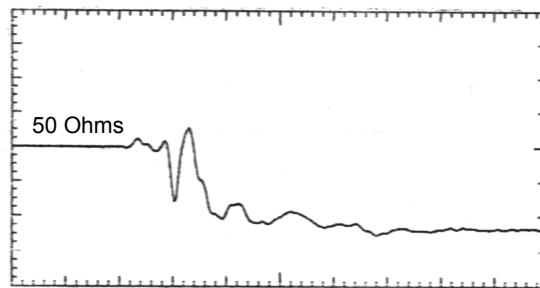
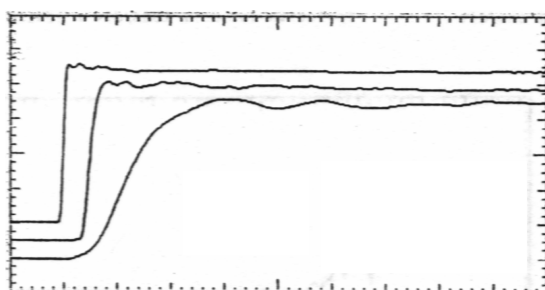
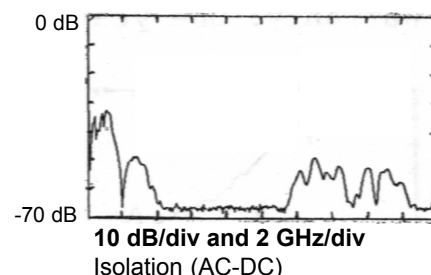
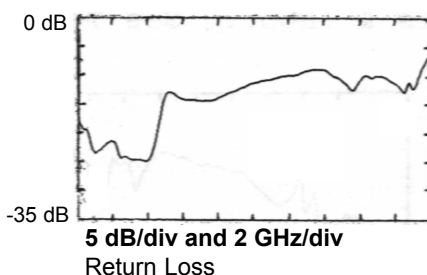
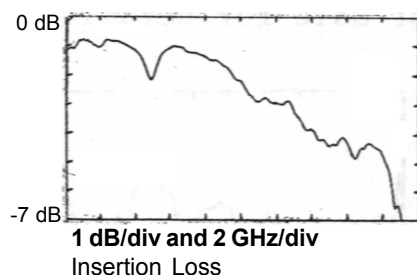


The Model 5580 is a broadband coaxial bias insertion tee and DC blocking capacitor designed to pass fast rise pulses with minimum waveform distortion. The risetime is 28 ps with a -3 dB bandwidth extending from 10 kHz to 15 GHz. The 5580 is designed to handle DC currents up to 1 Amp. See Notes [1 - 4].



|                                      |  |                      |   |
|--------------------------------------|--|----------------------|---|
| <b>Risetime (10%-90%)</b>            | 28 ps, 35 ps max.                                      | <b>DC Voltage</b>    | 50 V max.   |
| <b>Bandwidth (-3 dB)</b>             | 15 GHz, 10 GHz min.                                    | <b>Inductance</b>    | 1.1 mH, $\pm 25\%$  |
| <b>Low Frequency (-3 dB)</b>         | 10 kHz   | <b>DC Current</b>    | 1 Amp max.  |
| <b>Insertion Loss (0.1 - 3 GHz)</b>  | 1.0 dB, $\pm 0.5$ dB                                   | <b>DC Resistance</b> | 0.8 $\Omega$  |
| <b>Impedance</b>                     | 50 $\Omega$  | <b>Capacitance</b>   | 0.22 $\mu$ F, -50%, +80%  |
| <b>Refl. Coefficient (35 ps TDR)</b> | $\pm 8\%$ , $t < 100$ ps<br>-13%, $t > 100$ ps         | <b>CW RF Power</b>   | 2.5 W max.  |
| <b>Return Loss</b>                   | 0.1 < f < 10 GHz<br>RL > 15 dB - 1 dB/GHz * f (GHz)    | <b>Connectors</b>    | SMA jacks (f)   |
| <b>Isolation (AC/DC)</b>             | > 30 dB  | <b>Dimensions</b>    | 1.95" x 0.5" x 1.82" (5 x 1.3 x 4.6 cm)<br>pc card 2.3" x 2.1" x 1.1" |
| <b>Warranty</b>                      | 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 response 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. [4] The 5580 consists of a coaxial unit and a separate pc board. These are hi-z circuits. To prevent undesired HF resonances, do not use coax or long wires. If the pc board is not used, the low frequency cut-off is 500 kHz.