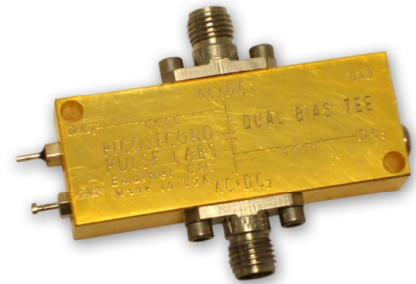


Performance/Features:

- 50 kHz to 40 GHz bandwidth
- 8 ps risetime
- 2 A maximum bias current
- 100 V_{DC} blocking voltage
- Available with 2.4 or 2.92 mm connectors



Model 5544-219

The Model 5544 is an ultra-broadband, high-current, coaxial bias insertion tee and DC blocking capacitor. The 5544's high DC blocking voltage (100V) and high bias current capability (2A) make it an excellent choice for broadband measurements of power devices and circuits.

5544 Electrical Specifications*

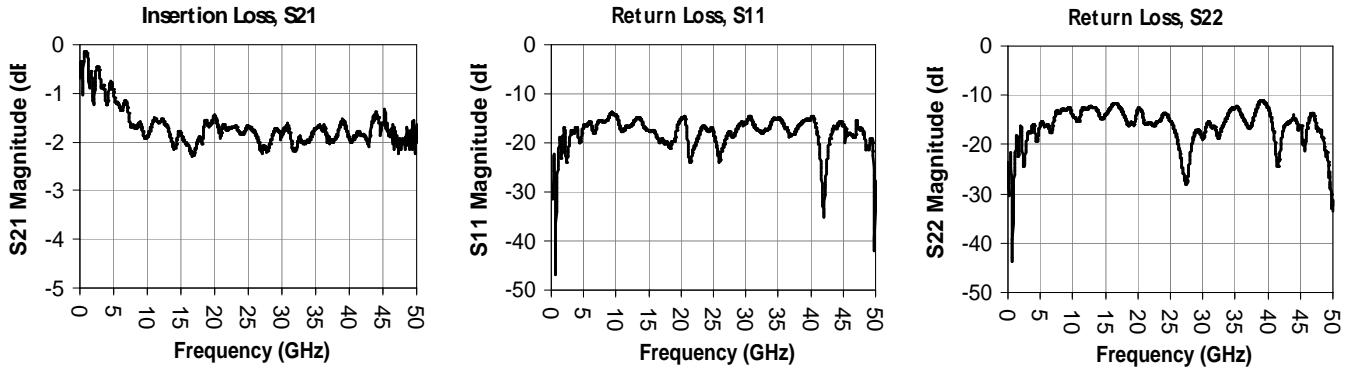
| PARAMETER | SYMBOL | UNITS | MIN | TYPICAL | MAX | COMMENTS |
|----------------------------|------------------|-------|--------------|----------|-------------|--------------------------------|
| Impedance | Z | Ohms | | 50 | | |
| Upper 3dB Frequency | f _{c,h} | GHz | 40 | | | |
| Risetime | t _r | ps | | 8 | | 10-90% |
| Lower 3dB Frequency | f _{c,l} | kHz | | 50 | | |
| Insertion Loss | S ₂₁ | dB | | See plot | 3 at 40 GHz | Measured with open on DC port. |
| Input (AC) Return Loss | S ₁₁ | dB | 10 to 40 GHz | See plot | | |
| Output (AC+DC) Return Loss | S ₂₂ | dB | 8 to 40 GHz | See plot | | |
| DC Bias Voltage | V | Volts | | | 100 | |
| DC Bias Current | I | A | | | 2 | DC port |
| DC Blocking Capacitance | C | μF | | 0.20 | | |
| DC Bias Inductance | L | μH | | 100 | | DC port |
| DC Bias Resistance | R | Ohms | | 0.5 | | DC port |
| RF Power | P | W | | | TBD | |

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

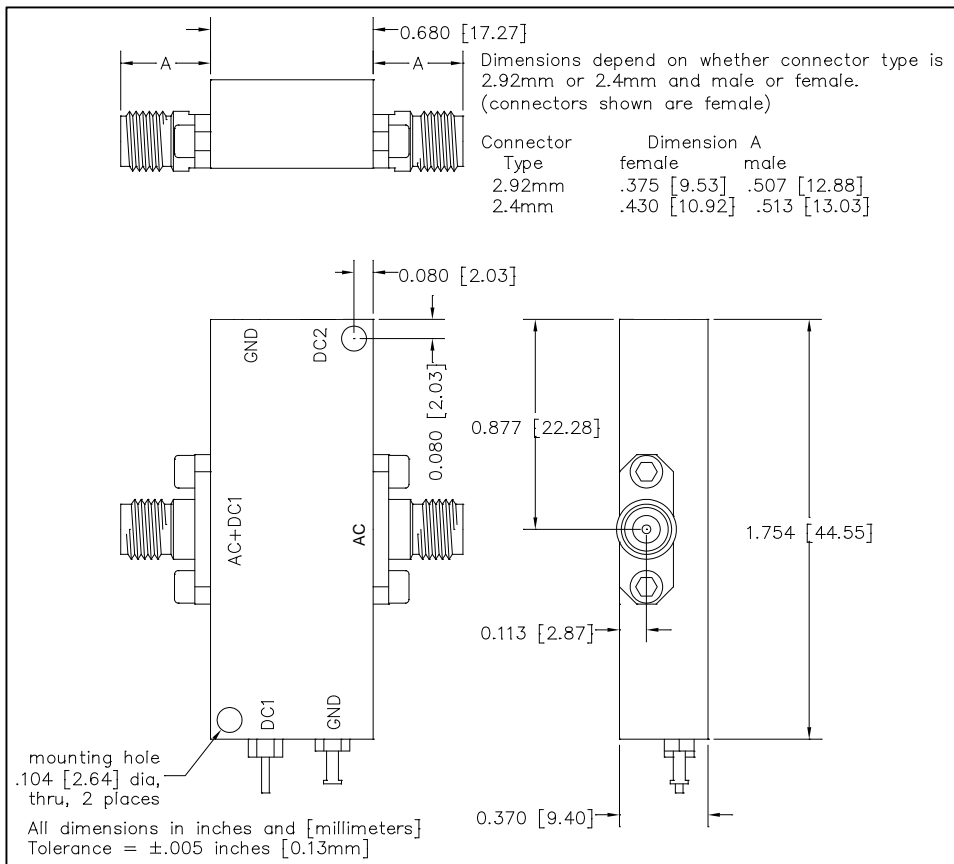
Warranty: One year. See Terms and Conditions of Sale for details.

5544 Typical Microwave Frequency Response

Linear sweep from 40 MHz to 50 GHz. AC connector is input port (port 1).
 AC + DC connector is output (port 2). Configured with 2.92mm connectors on input and output.



5544 Mechanical Dimensions



Note: DC2 and GND (near DC2) are not used (no connects) in this bias tee (this product shares the same housing as another product). DC2 and GND (near DC2) are plugged with screws for this product.

Ordering Information

| Model Number | Connector Configuration* | | |
|--------------|--------------------------|-----------------|---------------|
| | AC Connector | AC+DC Connector | DC Connection |
| 5544-219 | 2.92mm J | 2.92mm J | Solder Pin |
| 5544-223 | 2.92mm J | 2.92mm P | Solder Pin |
| 5544-227 | 2.92mm P | 2.92mm J | Solder Pin |
| 5544-229 | 2.92mm P | 2.92mm P | Solder Pin |
| 5544-202 | 2.4mm J | 2.4mm J | Solder Pin |
| 5544-206 | 2.4mm J | 2.4mm P | Solder Pin |
| 5544-211 | 2.4mm P | 2.4mm J | Solder Pin |
| 5544-213 | 2.4mm P | 2.4mm P | Solder Pin |

*Other connector configurations may be available on request.

J = Jack/Female, P = Plug/Male

Contact Information:

Picosecond Pulse Labs
P.O. Box 44
Boulder, Colorado 80306, USA

Telephone: 303.209.8100
Fax: 303.447.2236
Email: info@picosecond.com

Website: www.picosecond.com