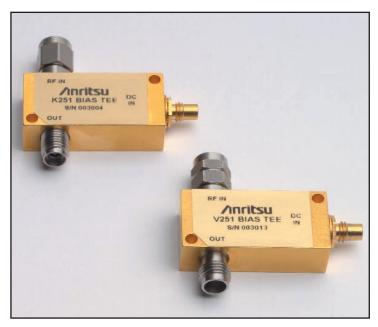
/inritsu

Ultra-Wideband Bias Tees Models K251 and V251



These ultra-wide bandwidth bias tees have been optimized for optical communications and other high-speed pulse, data or microwave applications. Designed to simultaneously apply both DC and RF drive signals to a device via a single input port, these bias tees feature fast rise times, excellent low frequency response, minimum insertion loss and flat group delay. Precision "K"™ and "V"™ connectors assure excellent impedance match across the wide bandwidths available. A one year warranty is provided.

Specifications

Model	K251	V251
Freq. Range: 3dB BW	50 kHz to 40 GHz	100kHz to 65 GHz
Insertion Loss	<2 dB typical	< 2.5 dB typical
Return Loss	See Plot	See Plot
Rise Time	< 7 ps typical	< 5 ps typical
Group Delay	110 +/- 2 ps typical	113 +/-2 ps typical
Max DC Current	100mA	100 mA
Max DC Voltage	I6VDC	I6VDC
Max RF Power	IW	I W
Connectors	RF In: K(m)	RF In: V(m)
	RF Out: K(f)	RF Out: V(f)
	Bias: SMC(m)	Bias: SMC(m)

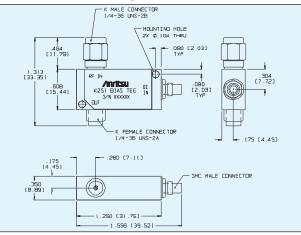
Specifications apply over the full DC Bias current range and over the temperature range of 0 C to +70 C.

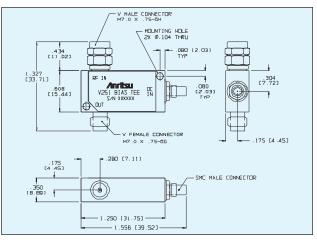
Ideal for Optical Communications Applications

Low Insertion Loss

Risetime: <5 ps (V251) <7 ps (K251)

Outline Drawings









Typical Low Frequency Insertion Loss (red) and Return Loss (green) measured on K251 over the range of 1kHz to 1 MHz.



Typical Low Frequency Insertion Loss (red) and Return Loss (green) measured on V251 over the range of 1 kHz to 1 MHz.



Typical Low Frequency Insertion Loss (yellow) and Return Loss (red) measured on K251 over the range of 40 MHz to 40 GHz.



Typical Low Frequency Insertion Loss (red) and Return Loss (yellow) measured on V251 over the range of 40 MHz to 65 GHz.

Typical Uncorrected Pulse Response for V251. Absolute risetime for the Bias Tee is derived from this measured data by applying the RSS method to compensate for the risetime of the input pulse.

$$\sqrt{T_{\rm BT}^{2} + T_{\rm PG}^{2}} = T meas.$$

CE

T meas. = uncorrected risetime T_{BT} = absolute Bias Tee risetime T_{PG} = risetime of input pulse



Sales Centers: Europe 44 (01582) 433200 Japan Asia-Pacific

81 (03) 3446-1111 65-2822400

50.0 ps/div 7930 ns 96.2 43.6190

All trademarks are registered trademarks of their respective companies

Sales Centers:

US Canada South America

#Avgs = 128

(800) ANRITSU (800) ANRITSU 55 (21) 286-9141

scale 38.0 mU/div offset 96.198 mV

positio

Done

43.624 ns

Microwave Measurements Division • 490 Jarvis Drive • Morgan Hill, CA 95037-2809 http://www.us.anritsu.com • FAX (408) 778-0239

June 2000; Rev: A Data subject to change without notice

11410-00253 Ultra-Wideband Bias Tees