KELVIN CONNECTION BIAS TEE

K252, V252 DC to 65 GHz



Kelvin Connection Bias Tee is designed for applications where both DC and RF signals are applied to the Device under Test (DUT) and precision DC measurements are required. A high resistance of the DC Coil results in a voltage drop that leads to a DC Biasing voltage error in the measurements. A Kelvin connection bias tee is used to eliminate DC Biasing errors as the sense coil allows accurate measurement of the DC Voltage applied across the DUT. Both 40 GHz and 65 GHz models are available with precision K connectors® and V Connectors® respectively. A male connector for the RF input and a female connector for the output is the standard interface for K252 and V252 Bias Tees. A SMC connector types with different connector configurations can be ordered through factory.

Features

- Broadband 0.1 to 65 GHz frequency coverage
- 50 V and 500 mA Current capability
- Low Insertion and SWR performance

| Model | Frequency Range 3dB BW | Insertion Loss | Return Loss | Max DC Current | Max DC Voltage | Max RF Power | Connectors | Inductance |
|-------|------------------------------|-----------------|-----------------------------------|-------------------|-------------------|--------------|--|----------------------------|
| K252 | 100 MHz to 40 GHz | <2.5 dB typical | 11 dB | 500 mA | 50 VDC | 1 W | RF In: K(m) RF Out: K(f) Bias: SMC(m) Sense: SMC(m) | Bias: 14 μH Sense: 8 μH |
| V252 | 100 MHz to 65 GHz | <3.7 dB typical | 10 dB to 60 GHz 8 dB to 65 GHz | 500 mA | 50 VDC | 1 W | RF In: V(m) RF Out: V(f) Bias: SMC(m) Sense: SMC(m) | Bias: 14 μH Sense: 8 μH |

Ordering information

Please specify model/order number, name, and quantity when ordering.

| Model/Order No. | Name | | | | |
|-----------------|--------------------------------|--|--|--|--|
| K252 | Kelvin Bias Tee, 0.1 to 40 GHz | | | | |
| V252 | Kelvin Bias Tee, 0.1 to 65 GHz | | | | |