



1.85 mm Bias Tee, 30 kHz to 85 GHz

Description:

Model SCV-000853402505-VFVF-U3 is a bias tee that operates from 30 kHz to 85 GHz. The bias tee offers 4.0 dB typical insertion loss and 7 dB typical return loss. The bias tee can handle up to +25 V_{DC} bias voltage and 500 mA current. The RF ports are equipped with 1.85 mm V(F) connectors. Other connector types are available under different model numbers.



Features:

- High Voltage
- High Current Capacity
- Low Insertion Loss

Applications:

- Test Lab
- Sub-assemblies
- System Integrations

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	30 kHz		85 GHz
Insertion Loss		4.0 dB	
Return Loss		7 dB	
Isolation		25 dB	
DC Voltage			+25 V _{DC}
DC Current			500 mA
Power Handling			1 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

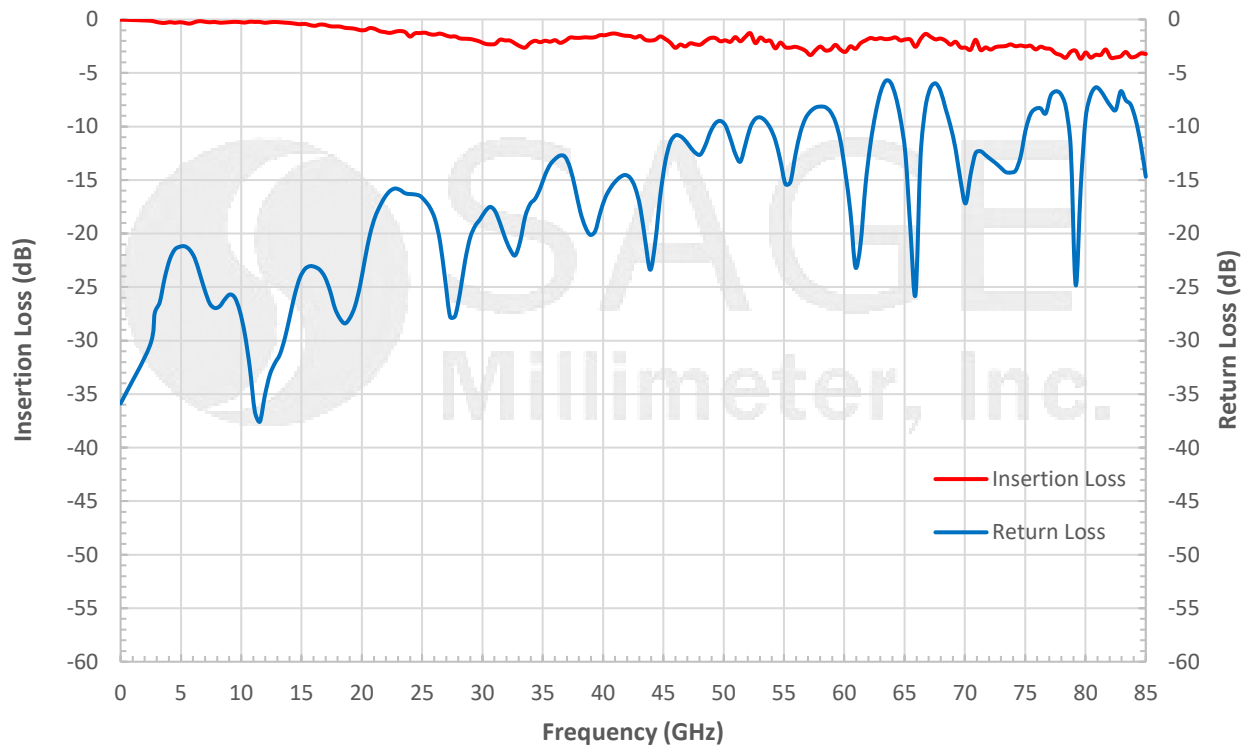
Mechanical Specifications:

Item	Parameter
Input Port	1.85 mm Female
Output Port	1.85 mm Female
DC Port	SMA Female
Case Material	Aluminum
Finish	Black Paint
Outline	CV-V-S2

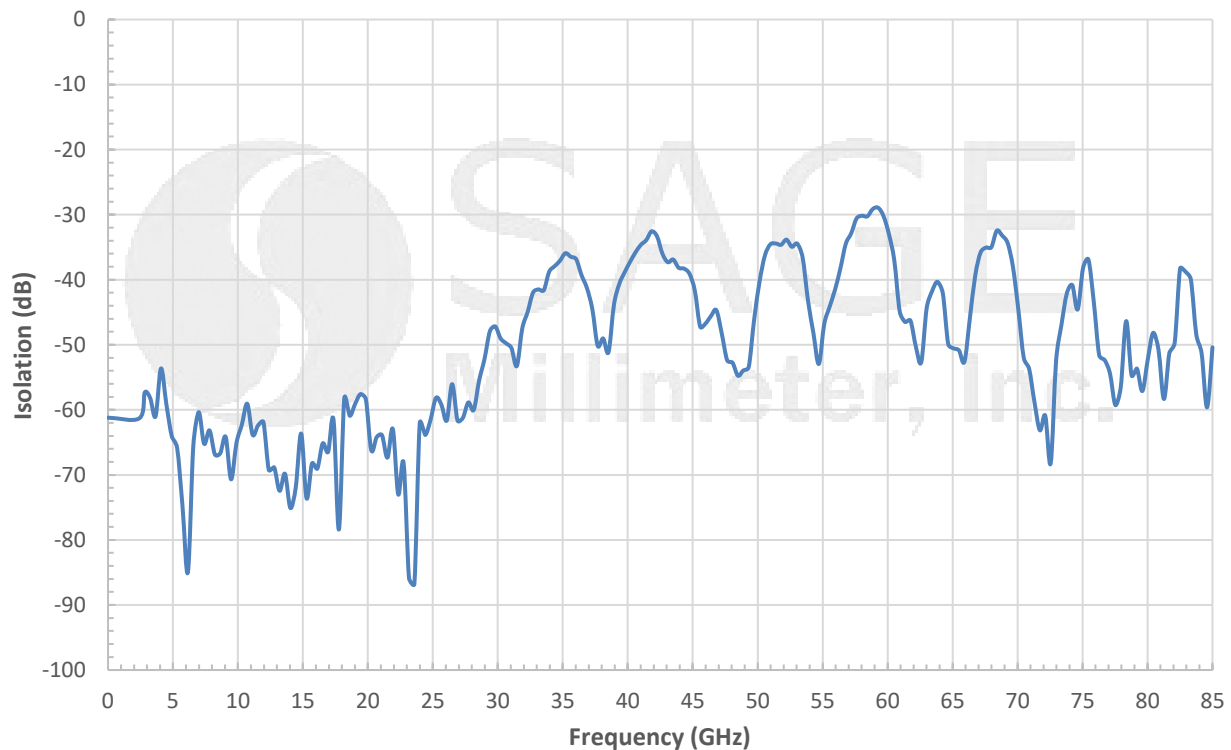


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Typical Performance vs. Frequency



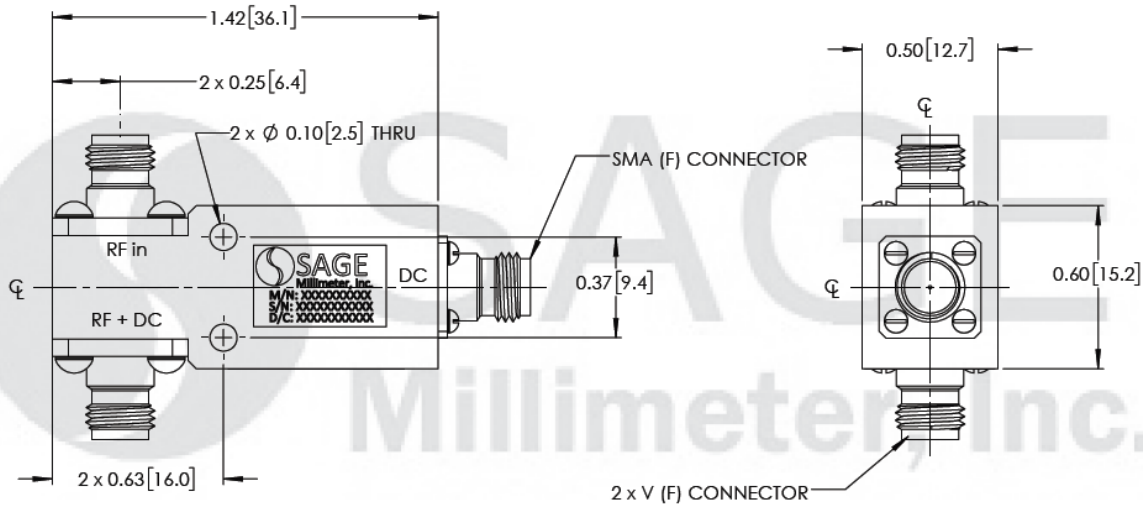
Typical Isolation vs. Frequency





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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25 °C case temperature.
- Other mechanical configurations are available under different model numbers.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- Any foreign objects in the bias tee will cause performance degradation and possible device damage.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-U3, is highly recommended.**