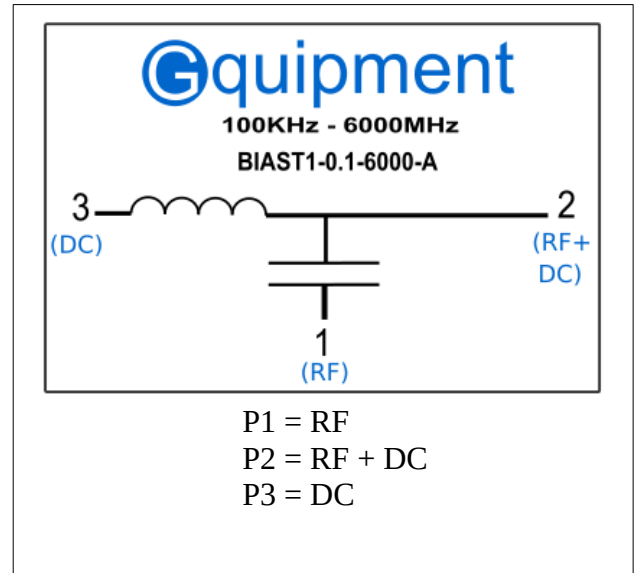
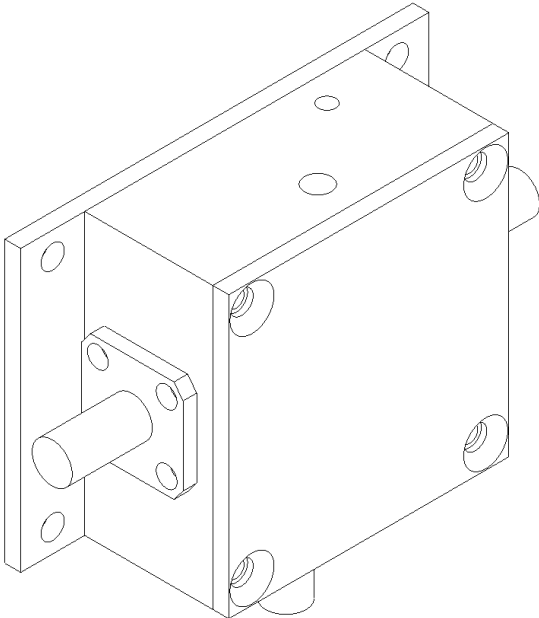


BIAS-T1-0.1-6000-A-XX Bias-T 100KHz – 6000MHz



Features

- Wide frequency range
- Flat insertion loss over its entire frequency range (within 1 dB)
- Low return loss
- Very high isolation
- 3 SMA ports
- Solid aluminium case
- RoHS compliant

Applications

- Power remote equipment
 - LNA
 - Laser diode
- Bias a RF Device Under Test

General description

This device can inject or subtract DC power from an RF signal that travels through its RF ports. Insertion loss between the RF ports is very low (< 1.0 dB) and has a very flat frequency curve. The RF ports are matched to 50 ohms and have a low return loss over their entire operation range.

This bias tee has a wide operating range of more than 4 decades, running from 100 KHz up to 6 GHz.

The isolation between the RF ports and DC power port is very high (> 35 dB, typical). The DC power port is implemented both as an SMA connector and as a set of terminals (feedthrough capacitor and turret terminal).

The bias tee is housed in a milled aluminum enclosure.

Specifications

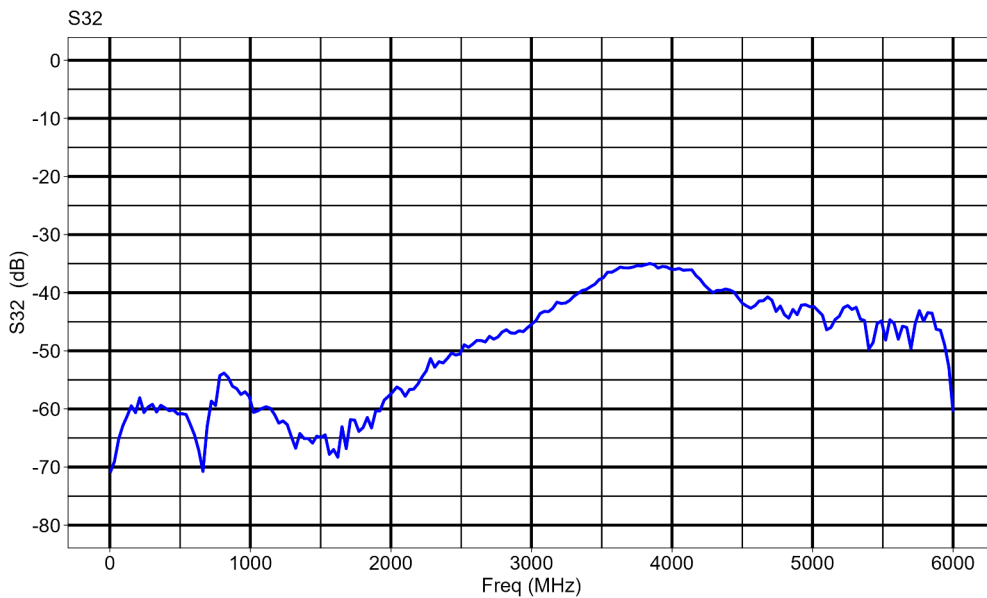
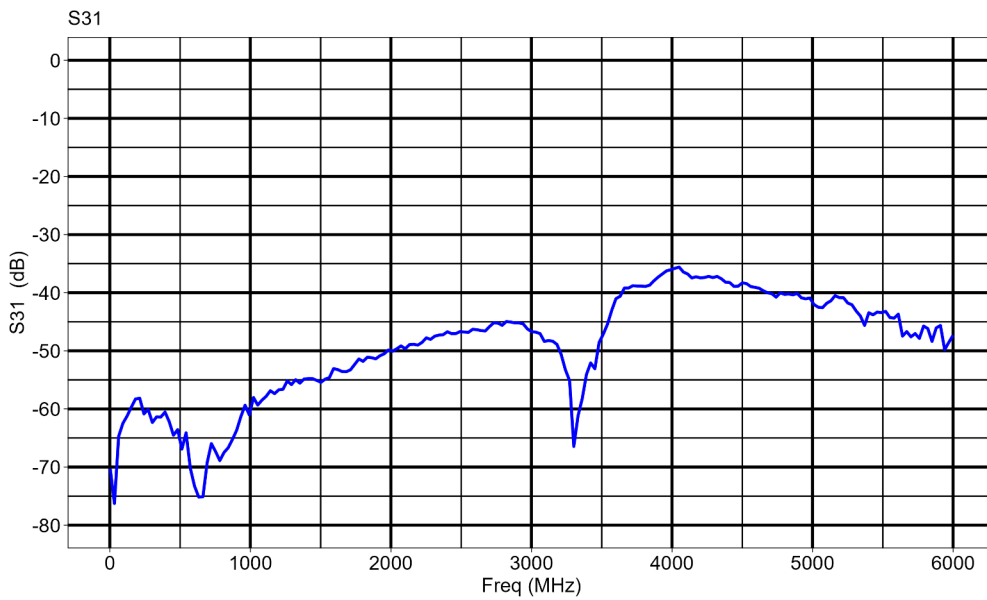
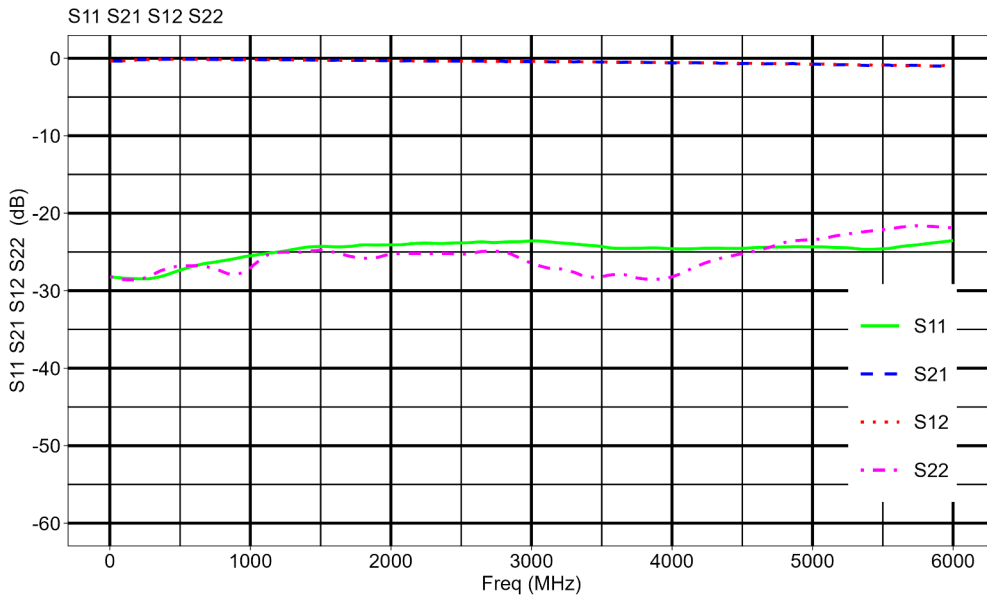
General

Item	Value	Tolerance	Dimension
Bandwidth	0.1 - 6000	-	MHz
DC resistance	2.23	+/- 0.5	ohm
Maximum DC bias current	320		mA
Maximum voltage at RF ports	50		V
Maximum RF power	30	-	dBm
Number of (female) SMA connector ports	3	-	-
Box weight BIAS-T-0.1-6000-A-..	0.058 (..YF-01) 0.055 (..NF-01)		kg
Outer dimensions (width x depth x height)	35 x 35 x 20	0.1	mm

Versions

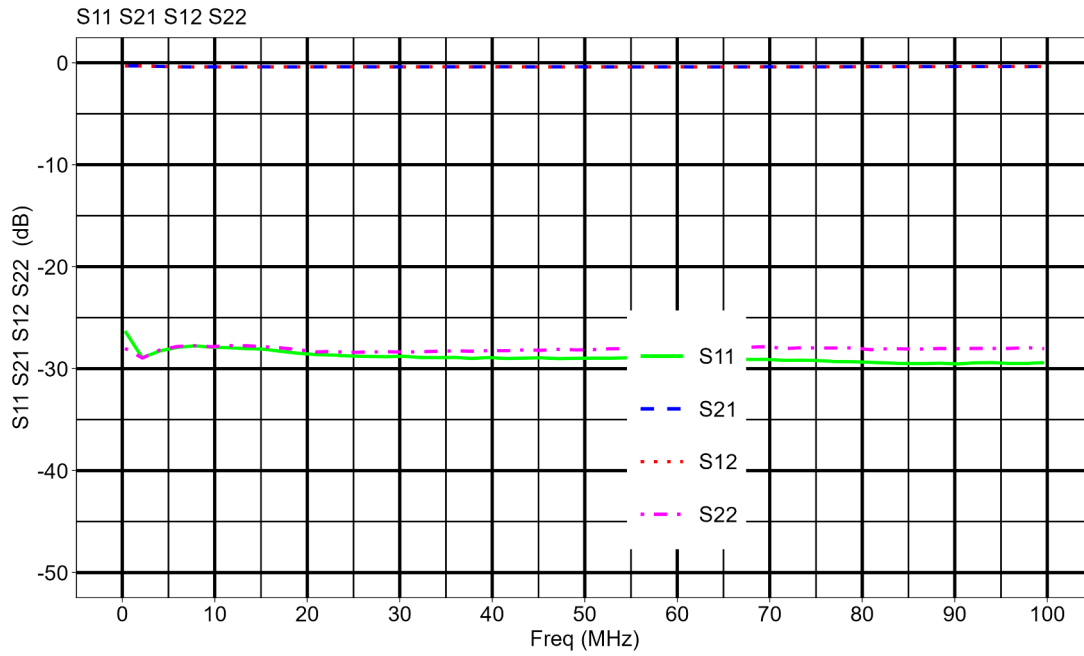
Type	Feature
BIAS-T-0.1-6000-A-NF	Box without mounting flange
BIAS-T-0.1-6000-A-YF	Box with mounting flange

S-parameters

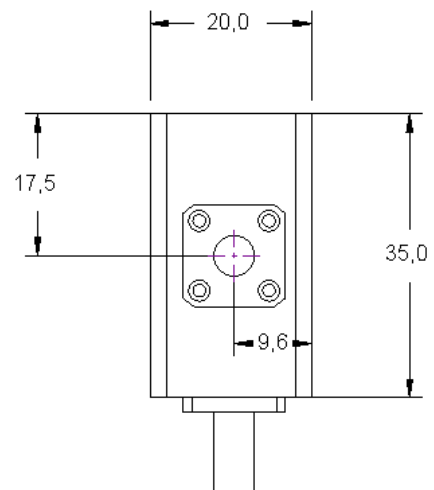
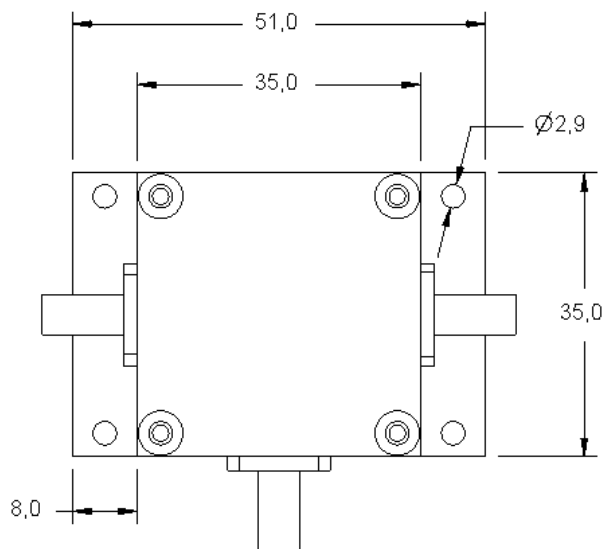
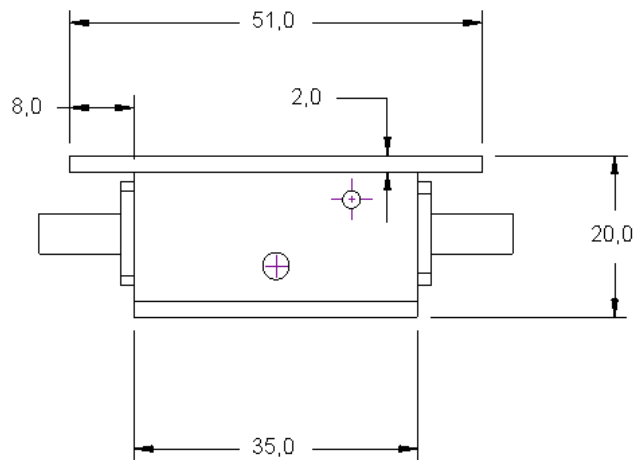


S-parameters

Low frequency performance



Enclosure Drawings



Note1 : All measures in mm. Tolerance : 0.1 mm.

Note2 : Drawing shows the BIAS-T-0.1-6000-A-YF version only. However, all dimension for the version BIAS-T-0.1-6000-A-NF are identical with the exception of the mounting flanges at the bottom side of the box, which don't exist in the '-NF version.

Configuration note

The BIAS-T1 is delivered with both a SMA connector and a set of terminals to apply DC power to the device.

It is possible to remove the SMA connector **or** the set of terminals.

Please note that changing the configuration is an irreversible process. Trying to reverse the configuration back to its original situation will degrade the build quality of this device severely.

Removal of the SMA connector

To remove the SMA connector, remove the SMA screws and open the top cover. Now, the SMA connector can be desoldered. Use a solder iron suitable for soldering lead free solder.

Place the SMA cover plate over the SMA hole using the SMA connector screws.

Removal of the set of terminals

Open the top cover and cut the wire between the feed-through capacitor terminal and pad P4. Gentle de-screw the feed-through capacitor by turning it counter clockwise.

The turret terminal is removed by a counter clockwise rotation too.



Revision history

Revision	Status	Date
003	Released	April 02, 2024

Legal

Specifications are subject to change without notice.

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