



A TIME AND PLACE *for everything™*

TW154 Regulated 0.5 to 3GHz, 3.3V Bias-Tee

The TW154 by Tallysman Wireless is a professional grade wideband Bias-Tee for injecting DC voltages onto coaxial lines. The regulated output voltage and the large output current makes this product highly suitable for many active antennas and amplifiers. It is useable up to 6GHz with higher insertion loss (see data below).

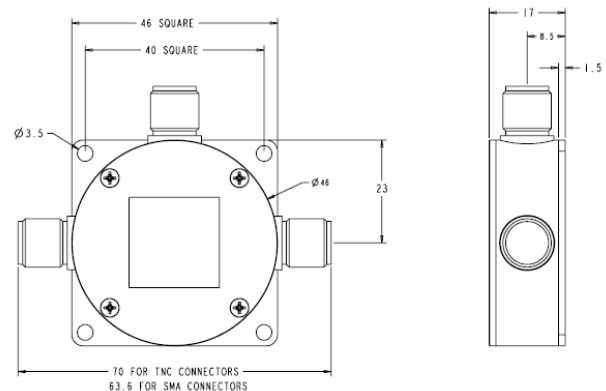
The TW154 is housed in a robust RF sealed, weatherproof (IP67) clear anodized aluminum enclosure and is available with 3 x SMA or TNC Jack connectors.

Applications

- L-Band Signal Distribution
- GNSS (GPS/GLONASS) Signal Distribution



TW154 Dimensions (mm)



Features

- Low insertion loss: 1dB typ.
- Regulated output voltage: 3.3 VDC
- VSWR: <1.3 @ 3 GHz
- Operating frequency: 0.5 to 3 GHz
- Wide input voltage range: 3.6 to 10 VDC**
- High current output: 450 mA**
- RF sealed, clear anodized aluminum enclosure
- IP67 compliant (TNC Jack connector only)
- SMA or TNC Jack connectors
- RoHS compliant

Benefits

- Compact form factor
- Allows the use of an external power supply
- Fits in line with antenna cable
- Robust design
- Suitable for harsh environments
- Industrial temperature range: -40 to 85 °C



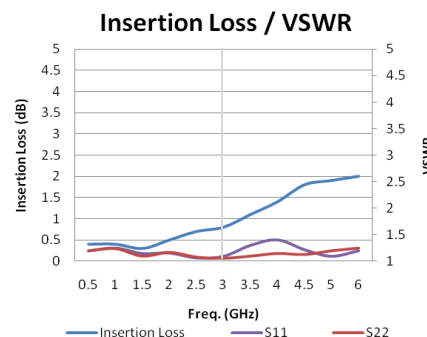
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TW154 Regulated 0.5 to 3GHz, 3.3V Bias-Tee Specifications

VCC=5V, over full bandwidth, T=25 °C

Electrical

- | | |
|-------------------------|---------------------|
| • Operational Frequency | 1 to 3 GHz |
| • VSWR (50Ω) | <1.3 @ 3 GHz |
| • Insertion Loss | 1 dB typ. |
| • Supply Current* | Output current 5 mA |
| • Supply Voltage** | 3.6 to 10 VDC |
| • Output Voltage | 3.3 VDC ± 2.5% |



* The TW154 Bias-Tee is capable of safely delivering up to 450 mA.

** The output current limit should be d-rated so as to restrict the maximum power dissipated within the regulated TW154 to 2W max, calculated as $P = (V_{in} - 3.3) \cdot I$.

Mechanicals

- | | |
|-------------------------|---|
| • Size | 1.81" L x 1.81" W x 0.669" H
(46 mm L x 46 mm W x 17 mm H) |
| • Weight | 100 g (0.22 lbs) |
| • Connectors | SMA Jack or TNC Jack |
| • DC Connector | SMA jack or TNC Jack |
| • Operating Temp. Range | -40 to +85 °C |
| • Enclosure | Clear anodized aluminum |
| • Environmental | RoHS, and IP67 compliant (32-0154-2 only) |
| • Warranty | One year – parts and labour |

Ordering Information

- | | |
|---|-----------|
| • TW154 Bias-Tee with SMA Jack connector (for internal use) | 32-0154-0 |
| • TW154 Bias-Tee with TNC Jack connector (for internal use) | 32-0154-1 |
| • TW154 Bias-Tee with TNC Jack connector (for external use) | 32-0154-2 |

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