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

The TW154 is a professional grade wideband Bias-Tee for injecting DC voltages onto coaxial lines. The regulated output voltage and the high output current makes this bias-tee highly suitable for many active antennas and amplifiers. It is useable at higher frequencies 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.

### DC In DC In BC Bock DC In DC In Regulator S0 Ohm Line DC BC B DC Out

TW154 Dimensions (mm)



# Applications

Tallysman

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

### Features

- Low insertion loss: less than 1 dB at 3 GHz.
- 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: 350 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

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

Specifications VCC=5V, over full bandwidth, T=25 °C

### **Electrical**

- Operational Frequency
- VSWR (50Ω)

Tallysman

- Insertion Loss
- Supply Current
- Output Current\*
- Input Supply Voltage\*\*
- Output Voltage
- Quiescent Current (no load) @Vin=10V <250 μA</li>





\* The output current limit should be de-rated to restrict the maximum power dissipated w and should be calculated as Imax<=(125-Tamb)/(70\*(Vin-Vo)).

\*\* The drop-out voltage of the TW154 Bias-Tee is <= 0.15 V at lout =100 mA and <= 0.6 V at lout=350 mA

# Mechanicals

- Size
- Weight
- Connectors
- DC Connector
- Operating Temp. Range
- Enclosure
- Environmental
- Warranty

1.81" L x 1.81" W x 0.669" H (46 mm L x 46 mm W x 17 mm H) 100 g (0.22 lbs) SMA Jack or TNC Jack SMA jack or TNC Jack -40 to +85 °C Clear anodized aluminum RoHS, and IP67 compliant (32-0154-2 only) 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

Please contact Tallysman Wireless for additional information

### **Tallysman Wireless Inc**

36 Steacie Drive Ottawa ON K2K 2A9 Canada Tel 613 591 3131 Fax 613 591 3121 sales@tallysman.com

The information provided herein is intended as a guide only and is subject to change without notice. This document is not to be regarded as a guarantee of performance. Tallysman Wireless Inc. hereby disclaims any or all warranties and liabilities of any kind. © 2010 Tallysman Wireless Inc. All rights reserved.

Doc # 60-0031-0