

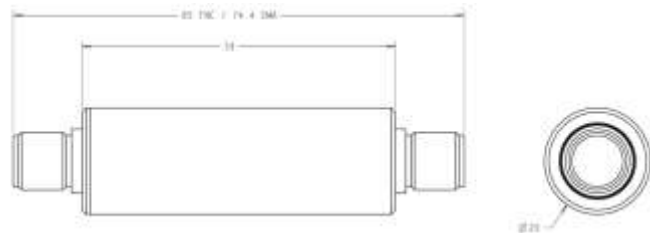


## TW125 Low Current / Low Voltage 1.2 to 1.8 GHz 27 dB gain In-line Amplifier

The TW125 has been replaced by an improved performance inline amplifier with a Part Number of TW125B.

All orders for the TW125 will be fulfilled with TW125B's. If at all possible, please change orders with a Part Number of TW125B.

**IMPORTANT:** Amplifiers are directional and must be installed in the orientation indicated on the product label. (Arrow points away from antenna)



### Applications

- All GNSS Signals – GPS, GLONASS, Galileo & SBAS
- Commercial, Industrial and Military Telematics Systems
- Wireless and Telecom Timing and Synchronization Applications

### Features

- Low Current / low voltage
- Very low noise
- Wide input voltage 3 to 16 Volts
- Nickel-plated brass, IP67 compliant housing
- Powered via antenna coax from receiver
- 50 Ohm port impedance
- Available SMA, TNC, and N-Type jack connectors
- RoHS and REACH compliant

### Benefits

- Improves signal reception
- Enables extended cable runs
- Avoid installation of costly low-loss cable
- Fits in line with antenna cable
- No external DC power supply required
- Easy to install - mounting clamp included



# TW125 Low Current / Low Voltage 1.2 to 1.8 GHz 27 dB gain In-line Amplifier

## Specifications

Vcc =3.3V, over full bandwidth, T=25 °C

### Electrical

|                        |   |
|------------------------|---|
| • Nominal Gain         | 27 dB +.1/-2 dB typ.                                  |
| • Pass Band Ripple     | +/-0.5 dB   |
| • Impedance            | 50 Ohms   |
| • Noise Figure         | 2 dB typ.   |
| • Bandwidth            | 1.2 to 1.8 GHz  |
| • Input VSWR           | 1.3 typ..   |
| • Output VSWR          | 1.3 typ.  |
| • Reverse Isolation    | >35 dB  |
| • Output P1dB          | +12.8 dB min  |
| • Group Delay          | 0.89ns (@1.4GHz), 0.82ns (@1.6GHz)                    |
| • Output IP3           | +5 dBm  |
| • Supply Range voltage | 3 to 16 VDC Nominal, 12 VDC recommended operating max |
| • Supply Current       | 25 mA typ.  |

### Mechanicals & Environmental

|  |  |               |                  |
|--|--|---------------|------------------|
| Mechanical Size (body dimensions only) | 2.32" L x 0.787" Dia. (59 mm L x 20 mm dia.) |               |                  |
| Connectors                             | SMA Jack, TNC Jack, or N-Type Jack           |               |                  |
| <b>Torque Limitations (in. lbs)</b>    | <b>N-type</b>                                | <b>TNC</b>    | <b>SMA</b>       |
|  | <b>6.5 - 8</b>                               | <b>9 - 11</b> | <b>3.6 - 4.5</b> |
| Operating Temp. Range                  | -40 to +85 °C                                |               |                  |
| Enclosure                              | Nickel-plated brass                          |               |                  |
| Environmental                          | RoHS, REACH, and IP67 compliant              |               |                  |
| Warranty                               | One year – parts and labour                  |               |                  |

### Ordering Information

|  |                              |
|--|------------------------------|
| • TW125 - 27dB gain In-Line Amp with SMA Jack      | 33-0125-0                    |
| • TW125 - 27dB gain In-Line Amp with TNC Jack      | 33-0125-1                    |
| • TW125 - 27dB gain In-Line Amp with N-Type female | 33-0125-14 (premium applies) |

IF AT ALL POSSIBLE, PLEASE USE THE PART NUMBER OF TW12B.

### Tallysman Wireless Inc

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