

## Avantek Products

# Wideband Small Signal Amplifiers 2.0 to 8.0 GHz

## Technical Data

**1**

### AWT Series

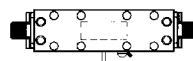
#### AWT —

**High Performance and  
Temperature Compensated  
Connectorized Amplifier  
Series**

#### Pin Configuration IC<sub>-</sub>, IS<sub>-</sub>, IX<sub>-</sub>



#### MAC<sub>-</sub>, MAS<sub>-</sub>, MAX<sub>-</sub><sup>(3)</sup>



(See Section 5 for detailed case drawings.)

### AWT Series<sup>2</sup>

Guaranteed Specifications @ 25°C Case Temperature

| Model    | Frequency Response (GHz)<br>Minimum | Gain (dB)<br>Minimum | Typical Gain (dB) | Noise Figure (dB)<br>Typ./Max. | Power Output for 1 dB Gain Compression (dBm)<br>Minimum | Gain Flatness (±dB)<br>Maximum | Typical Third Order Intercept Point (dBm) | VSWR (50 ohms)<br>Maximum In Out | Input Power Current @ +12 V <sub>I</sub><br>Typical (mA) | Case Type |
|----------|-------------------------------------|----------------------|-------------------|--------------------------------|---------------------------------------------------------|--------------------------------|-------------------------------------------|----------------------------------|----------------------------------------------------------|-----------|
| AWT-8032 | 2-8                                 | 16                   | 21                | 4.0/4.2                        | +15                                                     | 1.00                           | +23                                       | 2.0 2.0                          | 165                                                      | IC2       |
| AWT-8033 | 2-8                                 | 24                   | 31                | 3.8/4.0                        | +15                                                     | 1.25                           | +23                                       | 2.0 2.0                          | 235                                                      | IC4       |
| AWT-8034 | 2-8                                 | 33                   | 41                | 3.8/4.0                        | +15                                                     | 1.50                           | +23                                       | 2.0 2.0                          | 320                                                      | IC4       |
| AWT-8035 | 2-8                                 | 41                   | 50                | 3.8/4.0                        | +15                                                     | 1.75                           | +23                                       | 2.0 2.0                          | 400                                                      | IC6       |
| AWT-8052 | 2-8                                 | 15                   | 20                | 5.0/6.0                        | +20                                                     | 1.00                           | +28                                       | 2.0 2.0                          | 275                                                      | IC2       |
| AWT-8053 | 2-8                                 | 23                   | 30                | 3.9/4.5                        | +20                                                     | 1.25                           | +28                                       | 2.0 2.0                          | 350                                                      | IC4       |
| AWT-8054 | 2-8                                 | 32                   | 40                | 3.8/4.0                        | +20                                                     | 1.50                           | +28                                       | 2.0 2.0                          | 425                                                      | IC4       |
| AWT-8055 | 2-8                                 | 40                   | 49                | 3.8/4.0                        | +20                                                     | 1.75                           | +28                                       | 2.0 2.0                          | 510                                                      | IC6       |

### AWT Series —Temperature Compensated<sup>2</sup>

Guaranteed Specifications @ -54° to +100°C Case Temperature

|          |     |      |      |          |     |      |     |         |     |     |
|----------|-----|------|------|----------|-----|------|-----|---------|-----|-----|
| AWT-8043 | 2-8 | 18.5 | 24.5 | 5.8 Max. | +15 | 1.75 | +23 | 2.0 2.0 | 270 | IC4 |
| AWT-8044 | 2-8 | 26.5 | 32.5 | 5.5 Max. | +15 | 2.00 | +23 | 2.0 2.0 | 340 | IC6 |
| AWT-8045 | 2-8 | 34.0 | 41.0 | 5.3 Max. | +15 | 2.25 | +23 | 2.0 2.0 | 420 | IC6 |
| AWT-8063 | 2-8 | 18.0 | 24.0 | 7.5 Max. | +20 | 2.00 | +28 | 2.0 2.0 | 400 | IC4 |
| AWT-8064 | 2-8 | 25.0 | 32.0 | 5.7 Max. | +20 | 2.25 | +28 | 2.0 2.0 | 470 | IC6 |
| AWT-8065 | 2-8 | 32.5 | 41.5 | 5.5 Max. | +20 | 2.50 | +28 | 2.0 2.0 | 550 | IC6 |

Notes:

- Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.
- For a description of all available product options, refer to the beginning of this subsection.
- MA-Series case options available on selected amplifiers upon special request.