

## Avantek Products

# Wideband Small Signal Amplifiers 2.0 to 6.0 GHz

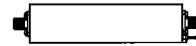
## Technical Data

**1**

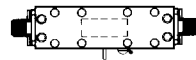
### AWT Series

#### AWT — High Performance and Temperature Compensated Connectorized Amplifier Series

#### Pin Configuration IC<sub>1</sub>, IS<sub>1</sub>, IX<sub>1</sub>



#### MAC<sub>1</sub>, MAS<sub>1</sub>, MAX<sub>1</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) |         | Gain Flatness (±dB)<br>Maximum | Typical Third Order Intercept Point (dBm) | VSWR (50 ohms)<br>Maximum |     | Input Power Current @ +12 V <sub>I</sub><br>Typical (mA) | Case Type |
|----------|-------------------------------------|----------------------|-------------------|--------------------------------|--|---------|--------------------------------|---|---------------------------|-----|--|-----------|
|          |                                     |                      |                   |                                | Minimum                                      | Maximum |                                |   | In                        | Out |  |           |
| AWT-6032 | 2-6                                 | 19                   | 23                | 3.3/3.5                        | +15  | 1.00    | +23                            | 2.0                                       | 2.0                       | 130 | IC2  |           |
| AWT-6033 | 2-6                                 | 28                   | 33                | 3.3/3.5                        | +15  | 1.00    | +23                            | 2.0                                       | 2.0                       | 190 | IC4  |           |
| AWT-6034 | 2-6                                 | 38                   | 44                | 3.3/3.5                        | +15  | 1.25    | +23                            | 2.0                                       | 2.0                       | 250 | IC4  |           |
| AWT-6035 | 2-6                                 | 48                   | 55                | 3.3/3.5                        | +15  | 1.50    | +23                            | 2.0                                       | 2.0                       | 310 | IC6  |           |
| AWT-6052 | 2-6                                 | 18                   | 23                | 5.0/6.0                        | +23  | 1.25    | +31                            | 2.0                                       | 2.0                       | 300 | IC2  |           |
| AWT-6053 | 2-6                                 | 27                   | 33                | 3.6/4.0                        | +23  | 1.25    | +31                            | 2.0                                       | 2.0                       | 350 | IC4  |           |
| AWT-6054 | 2-6                                 | 36                   | 43                | 3.2/3.5                        | +23  | 1.50    | +31                            | 2.0                                       | 2.0                       | 400 | IC4  |           |
| AWT-6055 | 2-6                                 | 46                   | 54                | 3.2/3.5                        | +23  | 2.00    | +31                            | 2.0                                       | 2.0                       | 460 | IC6  |           |

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

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

|          |     |    |    |          |     |      |     |     |     |     |     |
|----------|-----|----|----|----------|-----|------|-----|-----|-----|-----|-----|
| AWT-6043 | 2-6 | 24 | 28 | 4.8 Max. | +15 | 1.75 | +23 | 2.0 | 2.0 | 230 | IC4 |
| AWT-6044 | 2-6 | 31 | 36 | 4.5 Max. | +15 | 2.00 | +23 | 2.0 | 2.0 | 280 | IC6 |
| AWT-6045 | 2-6 | 40 | 45 | 4.5 Max. | +15 | 2.25 | +23 | 2.0 | 2.0 | 340 | IC6 |
| AWT-6063 | 2-6 | 23 | 28 | 6.5 Max. | +23 | 2.00 | +31 | 2.0 | 2.0 | 420 | IC4 |
| AWT-6064 | 2-6 | 31 | 37 | 5.0 Max. | +23 | 2.25 | +31 | 2.0 | 2.0 | 460 | IC6 |
| AWT-6065 | 2-6 | 38 | 45 | 4.5 Max. | +23 | 2.50 | +31 | 2.0 | 2.0 | 540 | 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.