

# 4 BIT DIGITAL ATTENUATOR

**TAN6007**

**Available in:**

SG4, 10 Lead Gull Wing

Package and Connectorized Housings

## Features

- DC - 50 MHz
- Fast Switching Speed: 20 ns Typical (GaAs)
- Integral TTL Driver
- Operating Temp. -55 °C to +85 °C
- Screening to the tables of MIL-STD-883 available

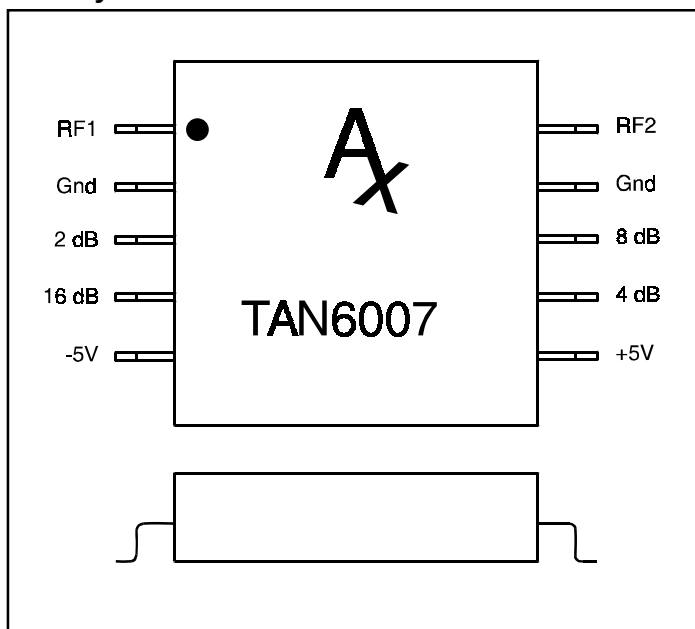
## Specifications

| CHARACTERISTIC         | TYPICAL<br>Ta = 25 °C | MIN/MAX<br>Ta = -55 °C to +85 °C |
|------------------------|-----------------------|----------------------------------|
| Frequency              | DC - 50 MHz           | DC - 50 MHz                      |
| Insertion Loss (dB)    | 1.5                   | 2.0 Max.                         |
| Attenuation Range (dB) | 2 - 30                | 2 - 30                           |
| Steps (dB)             | 2,4,8,16              | 2,4,8,16                         |
| Accuracy               | ±0.15 dB<br>±1%       | ±0.25 dB Max.<br>±2%             |
| VSWR                   | 1.3:1                 | 1.4:1 Max.                       |
| Switching Speed (nsec) | 20                    | 30 Max.                          |
| Transients (mV)        | 300                   | 350 Max.                         |
| DC Bias                | VDC<br>mA             | VDC<br>mA                        |
|                        | +5<br>3               | +5<br>5 Max.                     |
| DC Bias                | VDC<br>mA             | VDC<br>mA                        |
|                        | - 5<br>3              | - 5<br>5 Max.                    |

## Maximum Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -65°C to + 125 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... + 6.0, -6 Volts  
 Continuous RF Input Power ..... +30 dBm

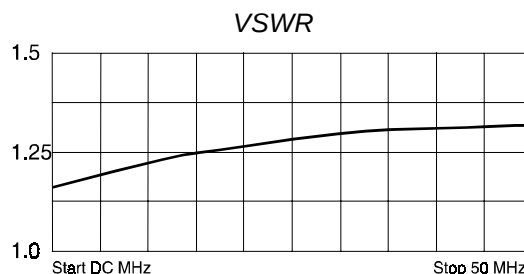
## Pin Layout



## Truth Table

| Control Input<br>4 Line TTL | Attenuator Setting |
|-----------------------------|--------------------|
| 1                           | Attenuate          |
| 0                           | Thru               |

## Typical Performance Data



# Amplifonix

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