

GT-0618-32

Standard Digital Attenuators

8 BIT

Applications

- Unsurpassed Attenuation Linearity over Frequency & Temperature
- 8 or 10 bit digital control
- Smooth transition between states
- Available in 32 or 64 dB Attenuation range
- Remotely programmable parallel or serial control interface



Specifications:

| Parameter | Specification | Units |
|------------------------------|---------------|--------|
| Frequency Range (min) | 6.0 – 18.0 | GHz |
| Attenuation Range | 0 – 32 | dB |
| Switching Speed | 2.5 | (usec) |
| Attenuation Flatness | ±1.5 | dB |
| Step Size (LSB) | 0.125 | dB |
| P1dB Compression Point (Max) | 10 | dBm |
| Insertion Loss (Max) | 3.3 | dB |
| VSWR (Max) | 2.0:1 | Ratio |

Screening:

Internal Visual per MIL-STD-883, Method 2017
Temperature Cycle: -65 °C to +100 °C, 10 cycles

Hermetically-sealed switches are fine and gross leak checked per MIL-STD-883, Method 1014.

Optional High-Rel screening available upon request. Contact the factory to discuss your screening requirements.

Environmental Specifications:

Designed to meet:

MIL-E-5400, MIL-STD-202, MIL-E-16400

Operating Temp: -55°C to +125°C

Storage Temp: -65°C to +150°C

Humidity: MIL-STD-202F, M103, Cond B

Shock: MIL-STD-202F, M213, Cond B

Altitude: MIL-STD-202F, M105, Cond B

Vibration: MIL-STD-202F, M204, Cond B

Thermal Shock: MIL-STD-202F, M107, Cond A

Temperature Cycle: MIL-STD-202F, M105C, Cond D

Additional Electrical Specifications:

DC Supply: +5V ±0.5V @ +275mA

-5V ±0.5V @ -50mA

Control:

8 Bits command

1 Strobe line

Positive edge latched

TTL/HMOS

Logic Levels:

Attenuation Accuracy: +/-0.15 dB or +/-1.5% whichever is greater

Attenuation Stability

over Temperature: +/-0.025 dB/°C

Mechanical Specifications:

Case Style: GT Outline

Finish: Gold Plate per MIL-G-45204

Bias & Control Pins: ø0.02" x 0.15" long

Connectors: SMA Female per MIL-C-39012

Weight: 90g max

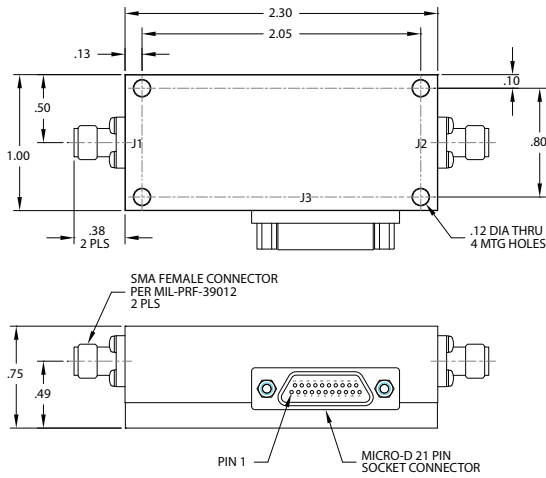
Mounting: ø0.10" through holes (4) places



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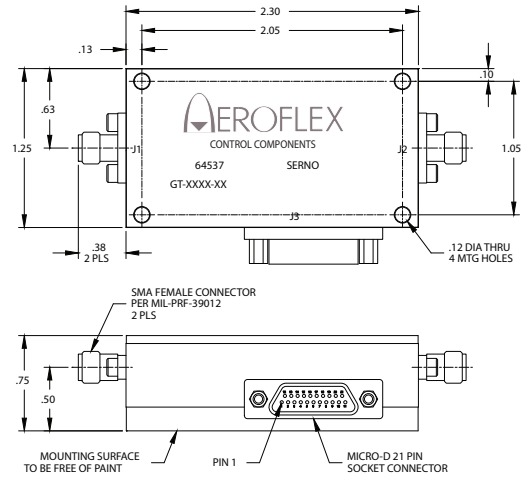
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CONTROL COMPONENTS
Outline Drawing:



| PIN | FUNCTION |
|-----|-----------|
| 1 | RETURN |
| 2 | STROBE |
| 3 | b0 |
| 4 | b1 |
| 5 | b2 |
| 6 | b3 |
| 7 | b4 |
| 8 | b5 |
| 9 | b6 |
| 10 | b7 |
| 11 | N/C (b8*) |
| 12 | N/C (b9*) |
| 13 | N/C |
| 14 | N/C |
| 15 | +V |
| 16 | RETURN |
| 17 | -V |
| 18 | N/C |
| 19 | RETURN |
| 20 | N/C |
| 21 | N/C |

*Used on 10 bit option



OUTLINE CASE STYLE GT

Notes:

1. Mean Attenuation = average attenuation over the frequency range at constant command.
2. Measurements at 0 dBm input power unless otherwise
3. Attenuation range must be specified by adding a "32 or 64" to the end of the part number (eg. GT061832)
4. Standard Control Interface is 8 bit. Control interface is also available in 10 bit interface. Add suffix (10) after attenuation range suffix. Other custom options available upon request.

Part Number Ordering Information: Custom Options – Contact the Factory

- GT : Series
- - 0206 : Frequency Range
- - 64 : Attenuation Range (32) or (64)
- - 10 : 10 bits
- - F : Free Running
- - H : Hemetic Seal
- Gray epoxy paint per MIL-C-22750
- Video transient suppression
- GPO connectors
- ECL logic input
- Phase and amplitude tracking
- Other frequency ranges available from 1MHz to 26GHz
- Reversed logic
- Available without SMA connectors for drop-in applications
- High rel screening

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Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.