

# GT-0206-32

## 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)	2.0 – 6.0	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)	2.3	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

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



Revision Date: 2/23/2011

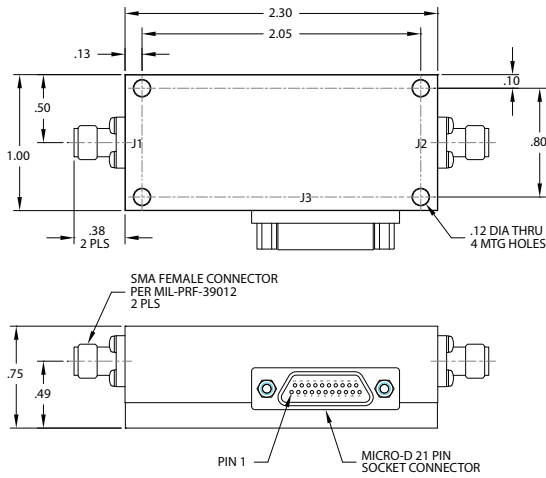
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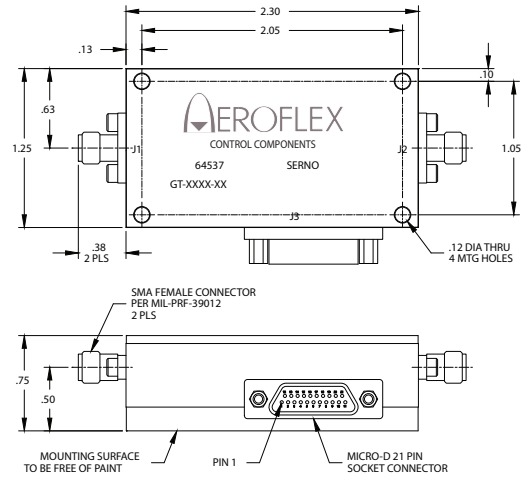
# AEROFLEX

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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