

**CDAT-0.2G3G-127-7** is an digital controlled attenuator that operates over the 0.2 to 3.0 GHz frequency range. This model utilizes 7 bits control, the corresponding attenuation is 0-127 dB.

Features:

- Wide Bandwidth
- Fast Response
- Low VSWR
- Miniature Size

**Specifications:**

Frequency Range: 0.2-3.0 GHz  
 Attenuation Range: 127 dB Max  
 Insertion Loss: 4.2 dB Typ, 6.0 dB Max  
 Attenuation Flatness: +/-0.40dB @ 1-25dB  
 +/-2% @>26dB  
 VSWR: 1.5:1 Max  
 Control Bits: 7 bits  
 Least Significant Bit (LSB): 1 dB  
 Control Logic: TTL  
 Power Handling: +20 dBm CW Max  
 Power Supply: +5 V @ 162 mA Typ  
 Switching Time: 2 ms Max

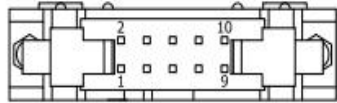
**Environmental Ratings:**


Temperature: -45°C to +85 °C Operating  
 -55 °C to +125 °C Non-Operating  
 Vibration: MIL-STD-202F, Method 204D Cond. B  
 Altitude: MIL-STD-202F, Method 105C Cond. B  
 Temperature Cycle: MIL-STD-202F, Method 107D Cond. A

**Mechanical Specifications:**

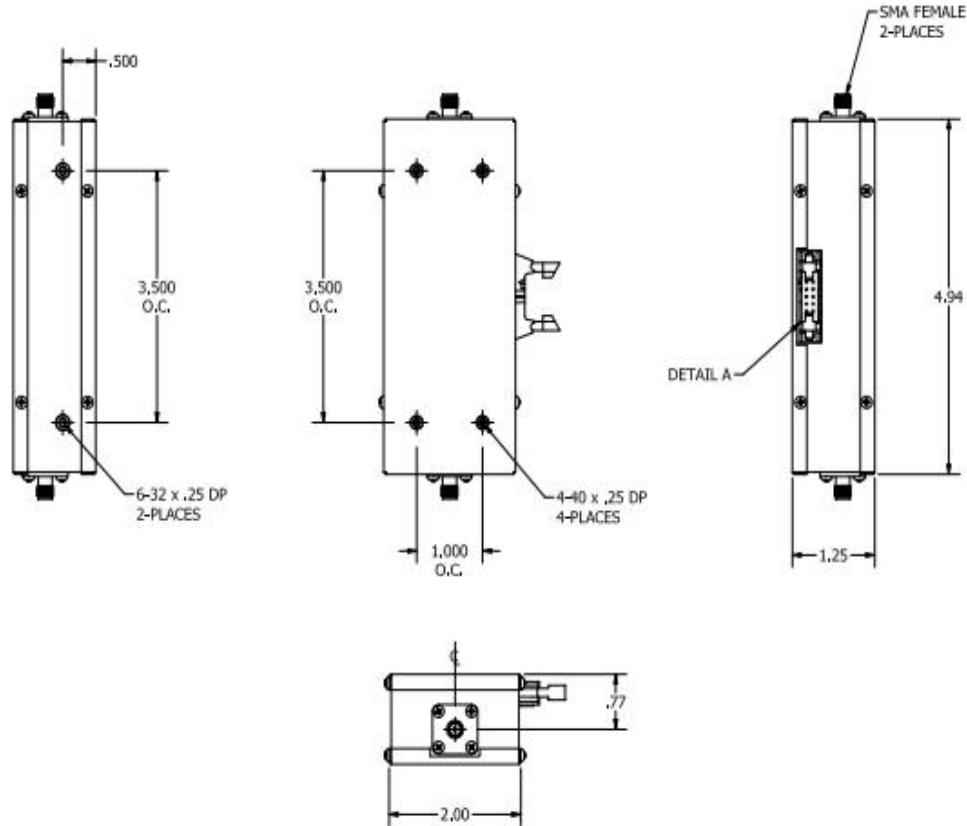
Parameter	Specification
Dimensions WxHxD	4.95X2.00X1.25 inches
RF Connectors In/Out	SMA-Female
DC Connector	3M #3793-5303
Material	Aluminum

**DC Connector PIN Assignment:**

Pin	Function	Pin Definition
1-7	Bit1-Bit7	
8	NC	
9	+5V DC	
10	GND	

Digital Control PIN Attenuators CDAT-0.2G3G-127-7			
DRAWN:	DWG NO.:	REV CODE: Rev.1.0	 <a href="http://www.connphy.com">www.connphy.com</a> <a href="mailto:sales@connphy.com">sales@connphy.com</a>
CHECKRD:	DATE: 08/07/15	SHEET : 1 OF 2	
ISSUED:	SIZE: A	SCALE : N / A	Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.

## Mechanical Outline (Inches):



## Truth Table :


Control TTL Input for 6 bits resolution							Attenuation
Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	
0	0	0	0	0	0	0	Reference
0	0	0	0	0	0	1	1.0 dB
0	0	0	0	0	1	0	2.0 dB
0	0	0	0	1	0	0	4.0 dB
0	0	0	1	0	0	0	8.0 dB
0	0	1	0	0	0	0	16.0 dB
0	1	0	0	0	0	0	32.0 dB
1	0	0	0	0	0	0	64.0 dB
1	1	1	1	1	1	1	127.0 dB

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### Digital Control PIN Attenuators

CDAT-0.2G3G-127-7

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