

**CDAT-0.1G18G-127-8** is an digital controlled attenuator that operates over the 0.1 GHz to 18.0GHz frequency range. This model utilizes 8 bits control, the corresponding attenuation is 0-127.5 dB.

Features:

- Very wide band operation 0.1-6.0 GHz
- 0.5 dB LSB Steps to 127.5 dB
- Single Positive Control Line Per Bit

**Specifications:**

Frequency Range:	0.1-18.0 GHz
Attenuation Range:	127.5 dB
Insertion Loss:	18.5 dB Typ, 22 dB Max
Attenuation Accuracy:	+/-4.5 dB Typ
VSWR:	2.5:1 Max
Control Bits:	8 bits
Least Significant Bit (LSB):	0.5 dB
Control Logic:	TTL
Power Handling:	+25 dBm CW Max
Power Supply:	+5 V @ 140 mA -5 V @ 140 mA
Switching Time:	200ns Typ

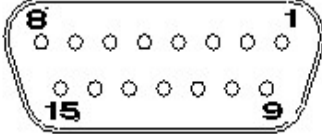
**Environmental Ratings:**


Temperature:	-40°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:**

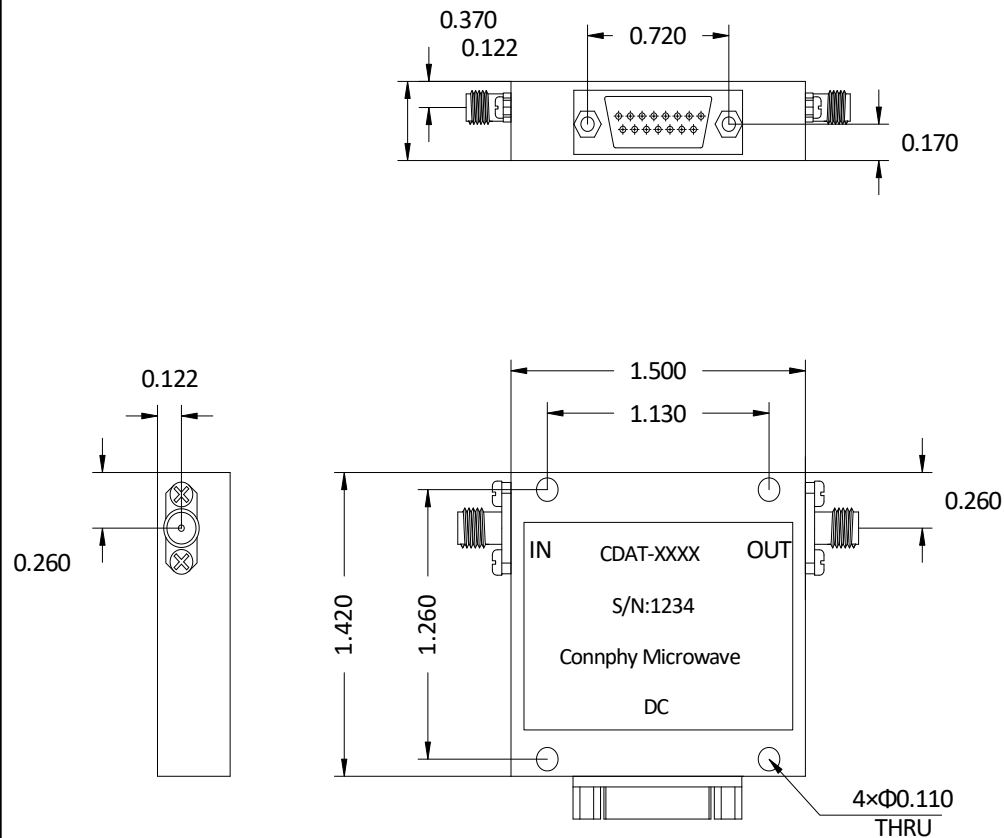
Parameter	Specification
Dimensions WxHxD	1.50X1.42X0.37 inches
RF Connectors In/Out	SMA-Female
DC Connector	MICRO-D15(Female)
Material	Aluminum

**DC Connector PIN Assignment:**

Pin	Function	Pin Definition
1	+5V	
2	GND	
3	-5V	
4-11	Bit1-Bit8	
12-15	GND	

Digital Control PIN Attenuators CDAT-0.1G18G-127-8			
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 Voltage TTL Input for 8 bits resolution								Attenuation
Bit 8	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	
1	1	1	1	1	1	1	1	Reference
1	1	1	1	1	1	1	0	0.5 dB
1	1	1	1	1	1	0	1	1 dB
1	1	1	1	1	0	1	1	2 dB
1	1	1	1	0	1	1	1	4 dB
1	1	1	0	1	1	1	1	8 dB
1	1	0	1	1	1	1	1	16 dB
1	0	1	1	1	1	1	1	32 dB
0	1	1	1	1	1	1	1	64 dB
0	0	0	0	0	0	0	0	127.5 dB

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## Digital Control PIN Attenuators

### CDAT-0.1G18G-127-8

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