

**CDAT-0.6G6G-30-8** is a digital controlled attenuator that operates over the 0.6 GHz to 6.0GHz frequency range. This model utilizes 8 bits control, the corresponding attenuation is 0-30 dB.

Features:

- Very wide band operation 0.6-6.0 GHz
- 0.125 dB LSB Steps to 30 dB
- Single Positive Control Line Per Bit

### Specifications:

Frequency Range:	0.6-6.0 GHz	
Attenuation Range:	30 dB	
Insertion Loss:	2.0 dB Max	
Attenuation Accuracy:	+/-0.20 dB	@1-10 dB
	+/-0.30 dB	@10-20 dB
	+/-0.35 dB	@20-30 dB
VSWR Input:	1.7:1 Max	
Control Bits:	8 bits	
Least Significant Bit (LSB):	0.125 dB	
Control Logic:	TTL	
Power Handling:	+17 dBm CW Max	
Power Supply:	+12 to +15Vdc @ 130 mA	
	-12 to -15Vdc @ 60 mA	
Switching Time:	3us Typ	

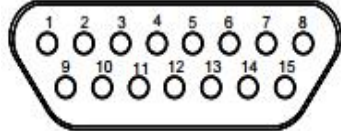
### Environmental Ratings:

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	2.5X2.0X0.51 inches
RF Connectors In/Out	SMA-Female
DC Connector	D-SUB 15 Pin (Male)
Material	Aluminum

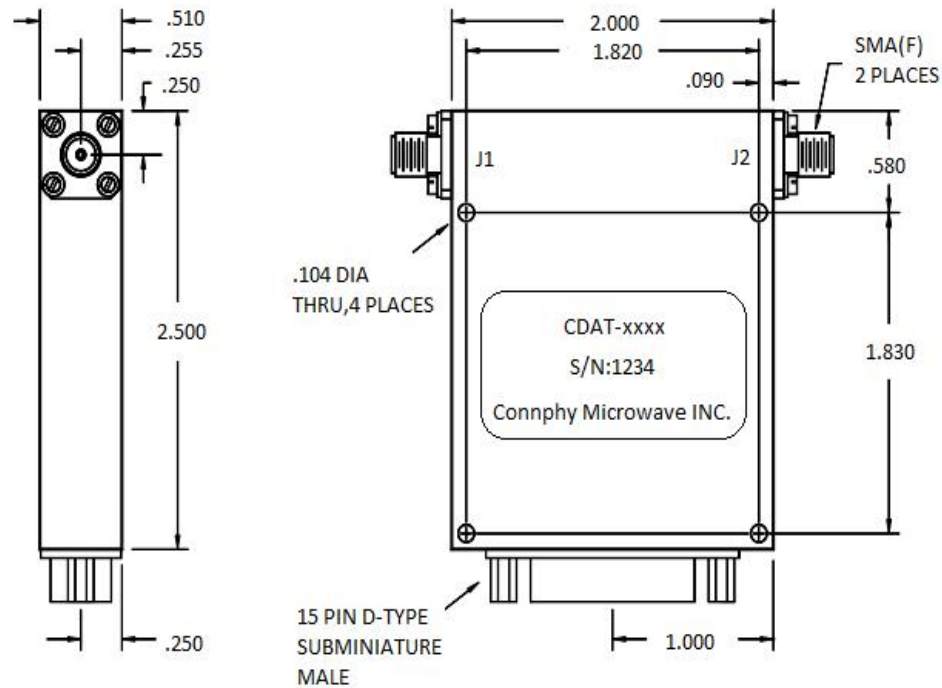
### DC Connector PIN Assignment:

Pin	Function	Pin Definition
1-4	NC	
5-12	Bit1-Bit8	
13	+VDC	
14	-VDC	
15	GND	

### Digital Control PIN Attenuators CDAT-0.6G6G-30-8

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	
0	0	0	0	0	0	0	0	Reference
0	0	0	0	0	0	0	1	0.125 dB
0	0	0	0	0	0	1	0	0.25 dB
0	0	0	0	0	1	0	0	0.5 dB
0	0	0	0	1	0	0	0	1 dB
0	0	0	1	0	0	0	0	2 dB
0	0	1	0	0	0	0	0	4 dB
0	1	0	0	0	0	0	0	8 dB
1	0	0	0	0	0	0	0	16 dB
1	1	1	1	1	1	1	1	32 dB

## 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

## Digital Control PIN Attenuators

### CDAT-0.6G6G-30-8

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 : 2 OF 2	
ISSUED:	SIZE: A	SCALE : N / A	
			Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.