

CDAT-0.1G40G-31-5 is a 5-Bit programmable 30 dB PIN diode attenuator with a step resolution of 1.0 dB over the frequency range of 100 MHz to 40 GHz.

Features:

- Very wide band operation 0.1-40.0 GHz
- 1 dB LSB Steps to 31 dB
- Single Positive Control Line Per Bit

Specifications:

Frequency Range:	0.1-40.0 GHz
Attenuation Range:	31dB
Insertion Loss:	6.0 dB Typ, 8.5 dB Max
Attenuation Flatness:	+/-1.0 dB @0.1-18 GHz +/-1.5 dB @18-30 GHz +/-2.0 dB @30-40 GHz
Input VSWR:	2.2:1 Max
Output VSWR:	2.2:1 Max
Control bits:	5 bits
Step:	1.0 dB
Control Logic:	TTL
Handling power:	+25 dbm CW Max
DC voltage:	+5 V @ 20 mA Typ -5 V @ 20 mA Typ
Switching speed:	200 ns Max

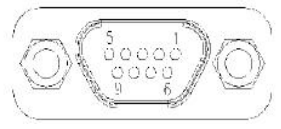
Environmental Ratings:


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:

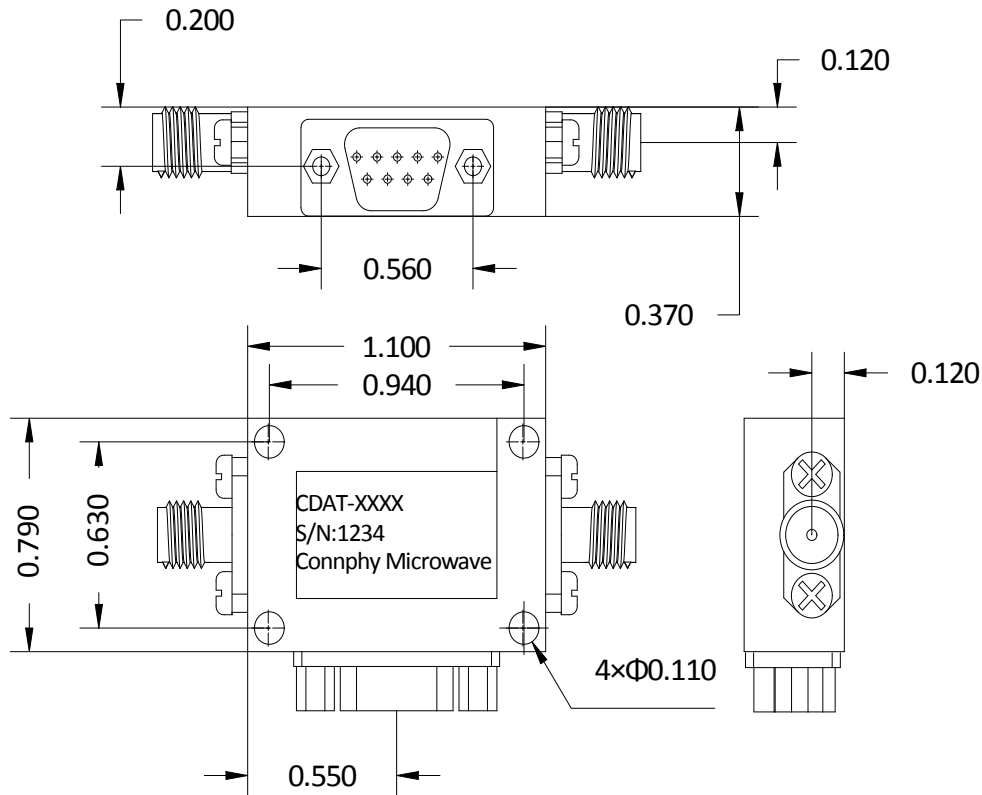
Parameter	Specification
Dimensions WxHxD	1.10X0.79X0.37 inches
RF Connectors In/Out	2.92mm-Female
DC Connector	MICRO-D9
Material	Aluminum

DC Connector PIN Assignment:

Pin	Function	Pin Definition
1	+5V	
2	-5V	
3	GND	
4-8	C1-C5	
9	NC	

Digital Control PIN Attenuators CDAT-0.1G40G-31-5			
DRAWN:	DWG NO.:	REV CODE: Rev.1.0	 www.connphy.com sales@connphy.com
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 5 bits resolution					Attenuation
Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	
1	1	1	1	1	Reference
1	1	1	1	0	1.0 dB
1	1	1	0	1	2.0 dB
1	1	0	1	1	4.0 dB
1	0	1	1	1	8.0 dB
0	1	1	1	1	16.0 dB
0	0	0	0	0	31.0 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-0.1G40G-31-5

DRAWN:	DWG NO.:	REV CODE: Rev.1.0	 www.connphy.com sales@connphy.com
CHECKRD:	DATE: 08/07/15	SHEET : 2 OF 2	
ISSUED:	SIZE: A	SCALE : N / A	Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.