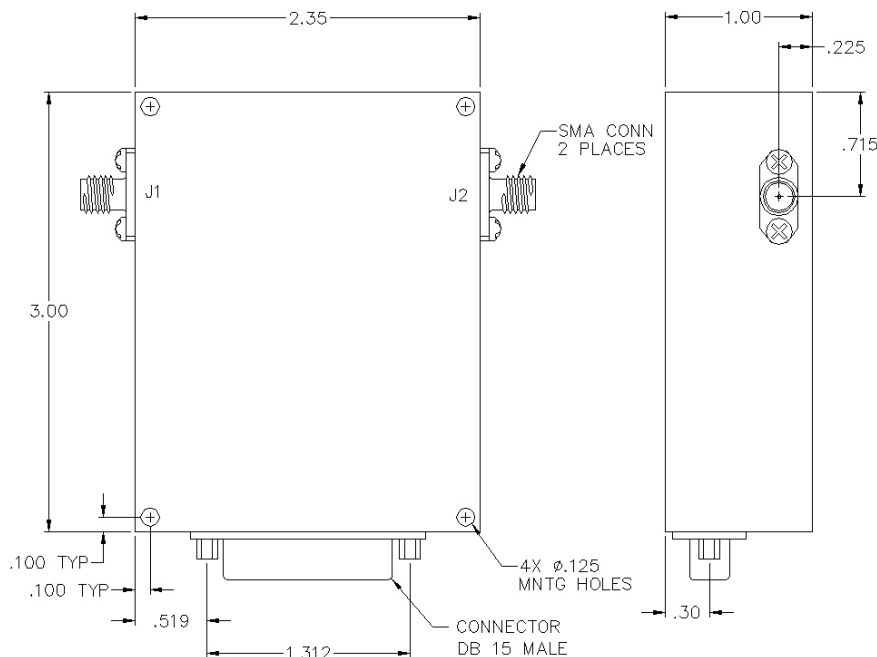


# DAT-22-482/1S

## DIGITAL STEP ATTENUATOR



## SPECIFICATIONS

Name: DAT-22-482/1S  
Frequency Range: 6-16 GHz  
Attenuation Range: 32 dB  
Number of Bits: 8  
Insertion Loss: 5.5 dB max.  
VSWR: 2.00:1 dB max.  
Least Significant Bit: 0.125 LSB  
Connector Type: SMA

Resolution of 8 bit is standard, up to 12 bits available.

Operating Power:  $\leq 0$  dBm  
Power Handling: +27 dBm max.  
Switching Time: 600 nsec typical.  
Control Logic: TTL  
Power supply: +12 to +15 Volts @ +100 mA, Typical  
-12 to -15 Volts @ -50 mA, Typical  
Operating Temperature: -25°C to +80°C

RF Connectors: SMA Female  
Bi-directional: Either SMA connector can be used as input.

This is a commercial off the shelf (COTS) product.  
For an equivalent product that meets DFARS materials compliance, contact sales.  
All specifications are subject to change without notice at any time. Rev: 190722

## ATTENUATOR ACCURACY VS. FREQUENCY

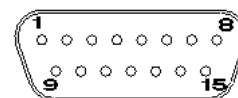
Bandwidth (2:1)		Bandwidth (4:1)	
Flatness (dB)	Attenuation (dB)	Flatness (dB)	Attenuation (dB)
$\pm 0.5$	0-10	$\pm 0.6$	0-10
$\pm 0.8$	0-20	$\pm 1.2$	0-20
$\pm 1.2$	0-30	$\pm 1.8$	0-30
$\pm 1.5$	0-40	$\pm 2.2$	0-40
$\pm 2.2$	0-64	$\pm 3.5$	0-64

Logic Table

State	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Att. 32 dB
-	0	0	0	0	0	0	0	0	0 dB
1	1	0	0	0	0	0	0	0	0.125 dB
2	0	1	0	0	0	0	0	0	0.25 dB
3	0	0	1	0	0	0	0	0	0.50 dB
4	0	0	0	1	0	0	0	0	1.0 dB
5	0	0	0	0	1	0	0	0	2.0 dB
6	0	0	0	0	0	1	0	0	4.0 dB
7	0	0	0	0	0	0	1	0	8.0 dB
8	0	0	0	0	0	0	0	1	16.0 dB

A combination of the above states will provide an attenuation equal to the sum of the selected states.

Pin-Out



Pin 01 = Bit 1 (LSB)	Pin 09 = N/C
Pin 02 = Bit 2	Pin 10 = N/C
Pin 03 = Bit 3	Pin 11 = N/C
Pin 04 = Bit 4	Pin 12 = N/C
Pin 05 = Bit 5	Pin 13 = +12 to +15 Vdc
Pin 06 = Bit 6	Pin 14 = -12 to -15 Vdc
Pin 07 = Bit 7	Pin 15 = Ground
Pin 08 = Bit 8	

