# DAT-13-480/1S

## DIGITAL STEP ATTENUATOR
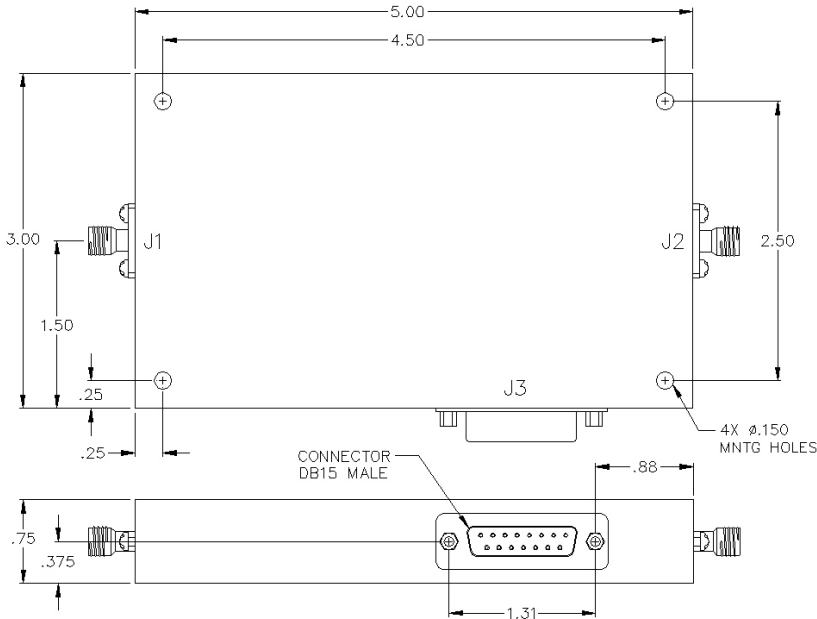
| Offset of Mean Attenuation (dB) | | Flatness (dB) | |
|---|---|---|---|
| ±0.5 | 0-16 | ±0.5 | 0-16 |
| ±0.8 | 17-32 | ±0.6 | 17-32 |
| ±1.5 | 32-64 | ±1.2 | 32-64 |

### 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.

## SPECIFICATIONS

Name:                    DAT-13-480/1S
Frequency Range:         2-4 GHz
Attenuation Range:       32 dB
Number of Bits:          8
Insertion Loss:          4.5 dB max.
VSWR:                    1.80:1 dB max.
Least Significant Bit:    0.125 LSB
Connector Type:          SMA

Operating Power: +20 dBm/100 mw max.
Power Handling:   +30 dBm max.
Switching Time:   600 nsec typical.
Control Logic:    TTL
Power supply:     ±5 Vdc @ ±300 mA, Typical
Operating Temperature: -25°C to +80°C

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

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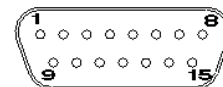
Pin 01 = Bit 1 (LSB)        Pin 09 = N/C
Pin 02 = Bit 2              Pin 10 = N/C
Pin 03 = Bit 3              Pin 11 = N/C
Pin 04 = Bit 4              Pin 12 = N/C
Pin 05 = Bit 5              Pin 13 = +5 Vdc
Pin 06 = Bit 6             Pin 14 = -5 Vdc
Pin 07 = Bit 7             Pin 15 = Ground
Pin 08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

## PULSAR
MICROWAVE CORPORATION