

## SPECIFICATIONS

|                              |                        |
|------------------------------|------------------------|
| Frequency Range:             | 1.00 - 2.00 GHz        |
| Insertion Loss:              | 5.0 dB Max             |
| VSWR:                        | 1.80:1 dB Max          |
| Attenuation Range:           | 32 dB                  |
| Number of Bits:              | 8                      |
| Least Significant Bit (LSB): | 0.125 dB               |
| Operating Power:             | + 20 dBm/100 mw Max    |
| Power Handling:              | + 30 dBm/1 watt Max    |
| Switching Time:              | 600 nsec, Typ          |
| Control Logic:               | TTL                    |
| Power Supply:                | ± 5 Vdc @ ± 300 mA Typ |
| Operating Temperature:       | - 25°C to + 80°C       |
| RF Connectors:               | SMA Female             |

These attenuators are bi-directional.  
Either J1 or J2 can be used as input.  
J3: DC Connector (DC Power & Logic)

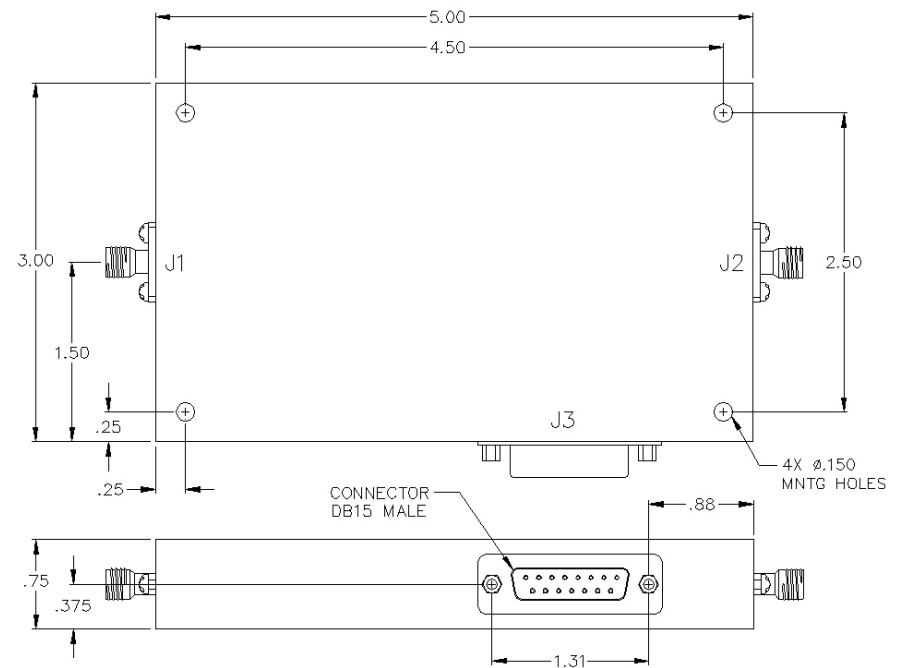
## LOGIC TABLE

| State | Bit 1<br>(Pin 1) | Bit 2<br>(Pin 2) | Bit 3<br>(Pin 3) | Bit 4<br>(Pin 4) | Bit 5<br>(Pin 5) | Bit 6<br>(Pin 6) | Bit 7<br>(Pin 7) | Bit 8<br>(Pin 8) | Att.<br>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 = +5 Vdc |
| Pin 06 = Bit 6       | Pin 14 = -5 Vdc |
| Pin 07 = Bit 7       | Pin 15 = Ground |
| Pin 08 = Bit 8       |                 |



| Offset of<br>Mean Attenuation (dB) |         | Flatness<br>(dB) |         |
|------------------------------------|---------|------------------|---------|
| ± 0.4                              | 0 - 16  | ± 0.4            | 0 - 16  |
| ± 0.8                              | 17 - 32 | ± 0.6            | 17 - 32 |
| ± 1.5                              | 32 - 64 | ± 1.2            | 32 - 64 |

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DESCRIPTION :

Switched Bit Digital Controlled Attenuator

MODEL NO. :

DAT-12-480/1S

DIMENSIONS ARE IN INCHES  
DECIMAL TOLERANCE:  
2 PLACE ± .02  
3 PLACE ± .010

SIZE  
A

CAGE CODE :  
0HR85

REV CODE :

180403

SCALE : N / A

ALL SPECIFICATIONS ARE SUBJECT TO  
CHANGE WITHOUT NOTICE AT ANY TIME

SHEET 1 OF 1