

## SPECIFICATIONS

|                              |                                                                           |
|------------------------------|---------------------------------------------------------------------------|
| Frequency Range:             | 6.00 - 18.00 GHz                                                          |
| Insertion Loss:              | 6.5 dB Max                                                                |
| VSWR:                        | 2.00:1 dB Max                                                             |
| Attenuation Range:           | 64 dB                                                                     |
| Number of Bits:              | 8                                                                         |
| Least Significant Bit (LSB): | 0.250 dB                                                                  |
| Operating Power:             | <= 0 dBm                                                                  |
| Power Handling:              | + 27 dBm Max                                                              |
| Switching Time:              | 600 nsec, Typ                                                             |
| Control Logic:               | TTL                                                                       |
| Power Supply:                | +12 to +15 Volts @ +100 mA, Typical<br>-12 to -15 Volts @ -50 mA, Typical |
| Operating Temperature:       | - 25°C to + 80°C                                                          |
| RF Connectors:               | SMA Female                                                                |

Resolution of 8 bit is standard; up to 12 bits available.  
 These attenuators are bi-directional.  
 Either J1 or J2 can be used as input.  
 J3: DC Connector (DC Power & Logic)

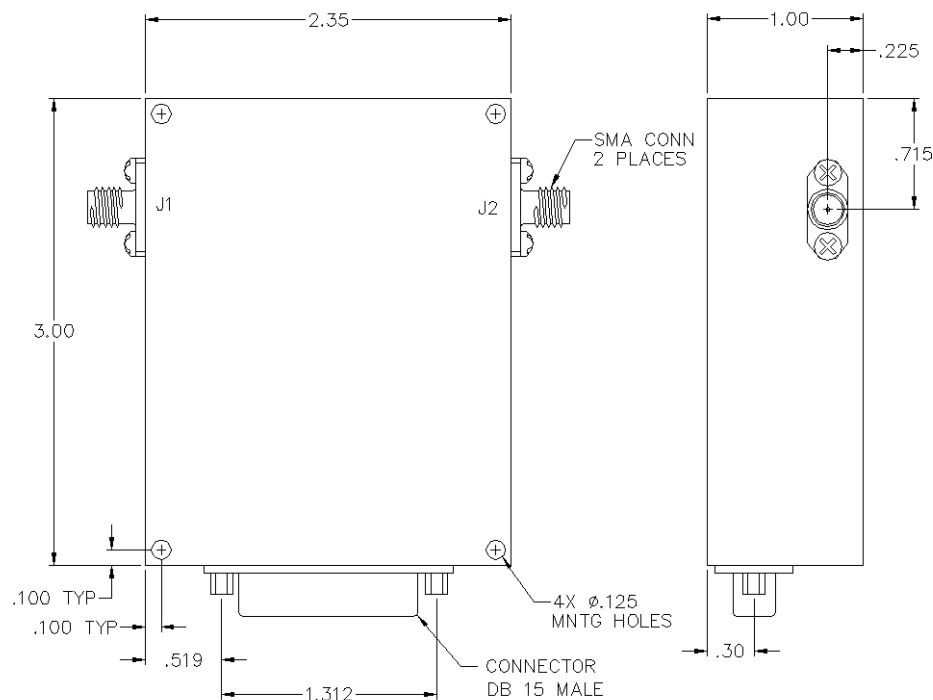
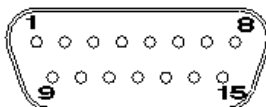
## LOGIC TABLE

| 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>64 dB |
|-------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------|
| -     | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0 dB          |
| 1     | 1                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0.25 dB       |
| 2     | 0                | 1                | 0                | 0                | 0                | 0                | 0                | 0                | 0.50 dB       |
| 3     | 0                | 0                | 1                | 0                | 0                | 0                | 0                | 0                | 1.0 dB        |
| 4     | 0                | 0                | 0                | 1                | 0                | 0                | 0                | 0                | 2.0 dB        |
| 5     | 0                | 0                | 0                | 0                | 1                | 0                | 0                | 0                | 4.0 dB        |
| 6     | 0                | 0                | 0                | 0                | 0                | 1                | 0                | 0                | 8.0 dB        |
| 7     | 0                | 0                | 0                | 0                | 0                | 0                | 1                | 0                | 16.0 dB       |
| 8     | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 1                | 32.0 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       |                         |



## ATTENUATOR ACCURACY VS FREQUENCY

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

# PULSAR

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DESCRIPTION :

Digital Controlled Attenuator

MODEL NO. :

DAT-25-482/1S

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