

## DESCRIPTION:

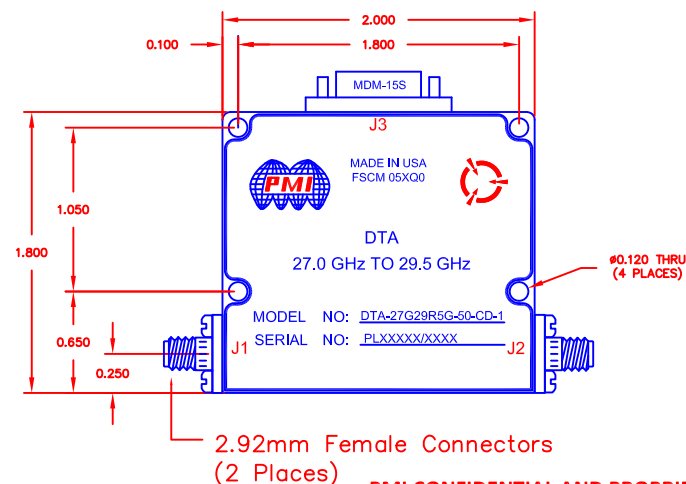
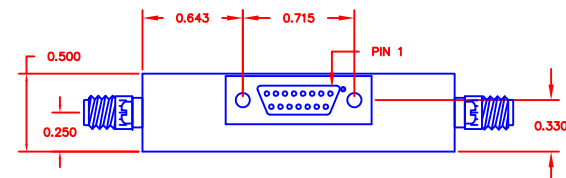
PMI MODEL NUMBER DTA-27G29R5G-50-CD-1 IS A 10 BIT PROGRAMMABLE 50 dB ATTENUATOR WITH STEP RESOLUTION AS LOW AS 0.05 dB OVER THE FREQUENCY RANGE OF 27.0 GHz TO 29.5 GHz. THIS MODEL IS OFFERED IN THE SLIM LINE HOUSING MEASURING ONLY 0.5" IN HEIGHT WITH 2.92mm FEMALE CONNECTORS.

## SPECIFICATIONS:

- FREQUENCY: ..... 27.0 GHz TO 29.5 GHz
- MEAN ATTENUATION RANGE: ..... 50 dB
- INSERTION LOSS: ..... 8.5 dB TYP
- VSWR: ..... 2.5:1 MAX
- FLATNESS: .....  $\pm 1.5$  dB TYP
- ACCURAY OF ATTENUATION: .....  $\pm 2.0$  dB TYP
- POWER HANDLING CAPABILITY: ..... +24 dBm CW MAX
- INPUT 1dB COMPRESSION: ..... +10 dBm TYP
- SWITCHING TIME:
  - ON TIME ..... 1.0  $\mu$ s MAX
  - OFF TIME ..... 0.5  $\mu$ s MAX
- POWER SUPPLY: ..... 15V @ 100mA MAX
- CONNECTORS: ..... (2) 2.92mm(F) & 15 PIN Micro-D-Female  
Shipped with mating Micro-D Male
- WEIGHT: ..... 3.0 oz (85 gm) Approximate
- FINISH: ..... BLUE EPOXY POLIMIDE COATING IAW MIL-C-22750,  
TYPE I OVER EPOXY POLIMIDE PRIMER  
IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.
- LOGIC INPUT:
  - LOGIC "0" (BIT OFF) ..... -0.3 to +0.8V
  - LOGIC "1" (BIT ON) ..... +2.0 to +5.0V

| PIN NO: | J3 PIN FUNCTIONS |
|---------|------------------|
| 1       | 1dB              |
| 2       | 0.5dB            |
| 3       | 0.25dB           |
| 4       | 0.125dB          |
| 5       | GND              |
| 6       | 0.06 dB          |
| 7       | 0.03 dB (LSB)    |
| 8       | GND              |
| 9       | Not Used         |
| 10      | Not Used         |
| 11      | +15VDC           |
| 12      | 16dB (MSB)       |
| 13      | 8dB              |
| 14      | 4dB              |
| 15      | 2dB              |

| REVISIONS |      |               |         |          |
|-----------|------|---------------|---------|----------|
| ZONE      | REV. | DESCRIPTION   | DATE    | APPROVED |
|           | —    | PRELIMINARY   | 9/20/18 |          |
|           | 1    | UPDATED SPECS | 9/21/18 |          |



PMI CONFIDENTIAL AND PROPRIETARY

## ENVIRONMENTAL RATINGS:

- TEMPERATURE: ..... -40°C TO +85°C (OPERATING)  
..... -65°C TO +125°C (STORAGE)
- HUMIDITY: ..... MIL-STD-202F, METHOD 103B COND. B
- SHOCK: ..... MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: ..... MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: ..... MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: ..... MIL-STD-202F, METHOD 107

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX  $\pm 0.020$   
X.XXX  $\pm 0.010$

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ISO 9001 CERTIFIED



| APPROVALS                 |  | DATE     |  | TITLE                |          |         | REV.        |        |
|---------------------------|--|----------|--|----------------------|----------|---------|-------------|--------|
| DRAWN<br><i>B. Thomas</i> |  | 12/22/15 |  | PRODUCT FEATURE      |          |         | 1           |        |
| REDRAWN<br><i>EW</i>      |  | 9/20/18  |  | DTA-27G29R5G-50-CD-1 |          |         | PRELIMINARY |        |
| ISSUED                    |  |          |  | SIZE                 | FSCM NO. | OWG NO. |             |        |
|                           |  |          |  | A                    | 05XQ0    |         |             |        |
|                           |  |          |  | SCALE                | N:S      |         | SHEET       | 1 OF 1 |