

**DESCRIPTION:**

PMI MODEL NUMBER DTA-2G18G-60-CD-2-OPT-1G18G-2 IS A NON-REFLECTIVE 10 BIT PROGRAMMABLE 60 dB PIN DIODE ATTENUATOR WITH STEP RESOLUTION AS LOW AS 0.06 dB OVER THE FREQUENCY RANGE OF 1.0 TO 18.0 GHz. THIS MODEL IS OFFERED IN A SLIM LINE HOUSING MEASURING ONLY 0.5" HEIGHT.

**SPECIFICATIONS:**

- FREQUENCY: \_\_\_\_\_ 1.0 GHz TO 18.0 GHz
- MEAN ATTENUATION RANGE: \_\_\_\_\_ 60 dB
- INSERTION LOSS: \_\_\_\_\_ 4.5 dB MAX
- VSWR: \_\_\_\_\_ 2.0 :1 MAX
- FLATNESS UP TO:
  - 20 dB \_\_\_\_\_ ±1.0 dB MAX
  - 40 dB \_\_\_\_\_ ±1.5 dB MAX
  - 60 dB \_\_\_\_\_ ±1.75 dB MAX
- ACCURACY OF ATTENUATION:
  - 0 dB TO 20 dB \_\_\_\_\_ ±1.0 dB MAX
  - 20 dB TO 40 dB \_\_\_\_\_ ±1.0 dB MAX
  - 40 dB TO 60 dB \_\_\_\_\_ ±1.0 dB MAX
- MINIMUM ATTENUATION STEP: \_\_\_\_\_ 0.06 dB
- OPERATING POWER: \_\_\_\_\_ 15 dBm TYP
- SURVIVAL POWER: \_\_\_\_\_ 1W Average from -65°C to +25°C
- SWITCHING TIME:
  - ON TIME \_\_\_\_\_ 0.75 us MAX
  - OFF TIME \_\_\_\_\_ 0.25 us MAX
- DC POWER SUPPLY: \_\_\_\_\_ +15V @ 160 mA MAX
- CONNECTORS: \_\_\_\_\_ 2 SMA & 15 PIN Micro-D-Female  
Shipped with Mating Micro-D Male  
With Pigtails >24" Length
- 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

**ENVIRONMENTAL RATINGS:**

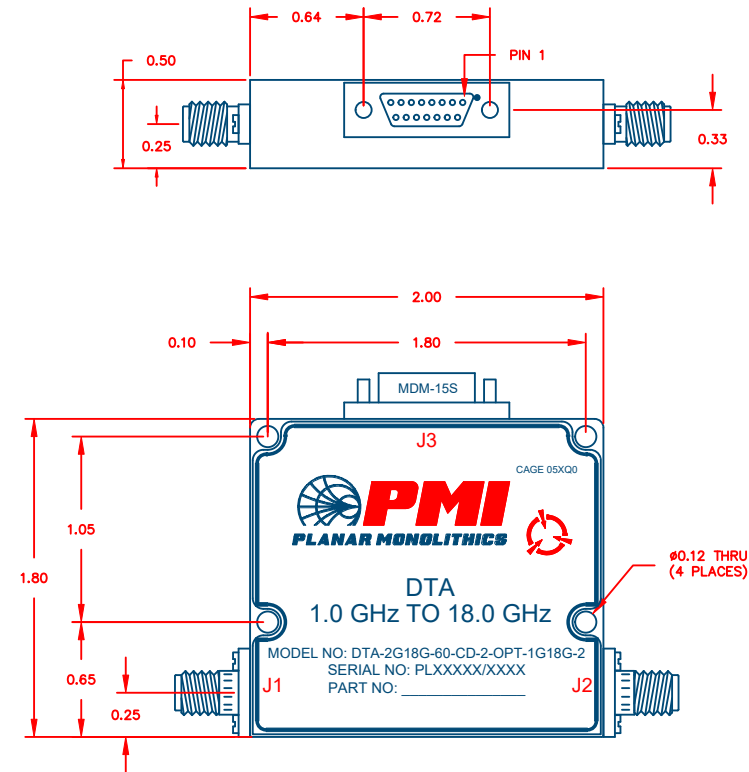
- TEMPERATURE: \_\_\_\_\_ -40°C TO +85°C (OPERATING)  
\_\_\_\_\_ -65°C TO +125°C (STORAGE)
- HUMIDITY: \_\_\_\_\_ MIL-STD-202F, METHOD 103B COND. B
- SHOCK: \_\_\_\_\_ MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: \_\_\_\_\_ MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: \_\_\_\_\_ MIL-STD-202F, METHOD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

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PIN NO.	J3 PIN FUNCTIONS
1	2dB
2	1dB
3	0.5dB
4	0.25dB
5	GND
6	0.13 dB
7	0.06 dB (LSB)
8	GND
9	Not Used
10	Not Used
11	+12VDC
12	32dB (MSB)
13	16dB
14	8dB
15	4dB

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	06/23/14	
	A1	ECN #15-0176	12/14/15	

**MECHANICAL OUTLINE**



**PMI CONFIDENTIAL AND PROPRIETARY**

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ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 X.XX ±0.020  
 X.XXX ±0.010

APPROVALS		DATE	TITLE			
DRAWN VR		06/23/14	PRODUCT FEATURE			
CHECKED			DTA-2G18G-60-CD-2-OPT-1G18G-2			
ISSUED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27023402	REV. A1
			SCALE N/A	SHEET 1 OF 1		