

**DESCRIPTION:**

PMI MODEL NUMBER DTA-0R5G18G-60-CD-1 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 0.5 TO 18.0 GHz. THIS MODEL IS OFFERED IN A SLIM LINE HOUSING MEASURING ONLY 0.5" HEIGHT.

**SPECIFICATIONS:**

- FREQUENCY: \_\_\_\_\_ 0.5 GHz TO 18.0 GHz
- MEAN ATTENUATION RANGE: \_\_\_\_\_ 60 dB
- INSERTION LOSS: \_\_\_\_\_ 4.8 dB MAX
- VSWR: \_\_\_\_\_ 2.0 :1 MAX
- FLATNESS UP TO:
  - 20 dB \_\_\_\_\_ ±1.0 dB TYP
  - 40 dB \_\_\_\_\_ ±1.25 dB TYP
  - 60 dB \_\_\_\_\_ ±3.0 dB TYP
- ACCURACY OF ATTENUATION:
  - 0 dB TO 20 dB \_\_\_\_\_ ±1.0 dB TYP
  - 20 dB TO 40 dB \_\_\_\_\_ ±1.5 dB TYP
  - 40 dB TO 60 dB \_\_\_\_\_ ±2.0 dB TYP
- MINIMUM ATTENUATION STEP: \_\_\_\_\_ 0.06 dB
- OPERATING POWER: \_\_\_\_\_ 15dBm TYP
- SURVIVAL POWER: \_\_\_\_\_ 1W Average from -65°C to +25°C
- SWITCHING TIME:
  - ON TIME \_\_\_\_\_ 1.0 us MAX
  - OFF TIME \_\_\_\_\_ 0.5 us MAX
- DC POWER SUPPLY: \_\_\_\_\_ +12V to +15V @ 150 mA MAX
- CONNECTORS: \_\_\_\_\_ 2 SMA & 15 PIN Micro-D-Female Shipped with Mating Micro-D Male
- WEIGHT: \_\_\_\_\_ 3.0 oz (85 gm) Approximate
- FINISH: \_\_\_\_\_ PAINTED BLUE
  
- LOGIC INPUT:
  - LOGIC "0" (BIT OFF) \_\_\_\_\_ -0.3 to +0.8V
  - LOGIC "1" (BIT ON) \_\_\_\_\_ +2.0 to +5.0V

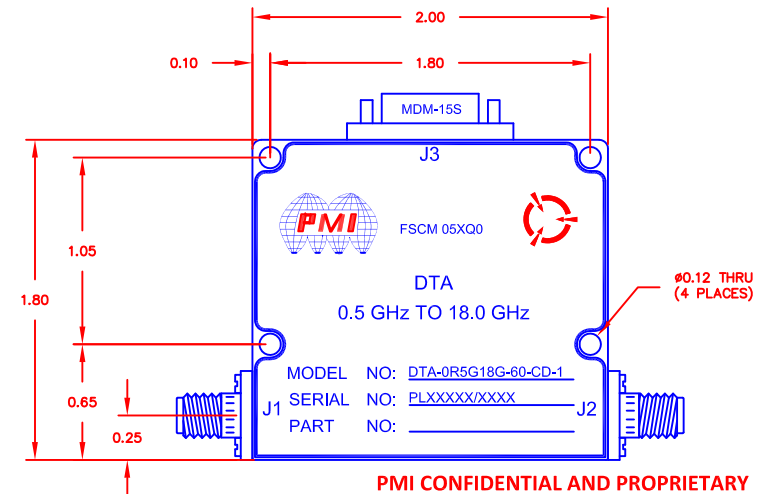
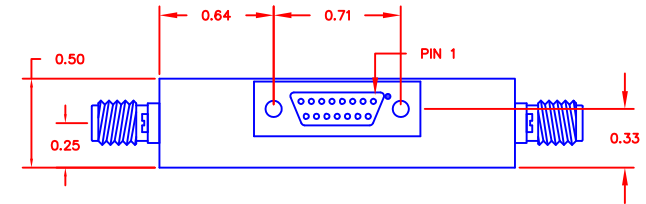
**ENVIRONMENTAL RATINGS:**

- 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	+15VDC
12	32dB (MSB)
13	16dB
14	8dB
15	4dB

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	10/15/12	
	A2	ECN # 13-0080	07/09/13	
	A3	ECN # 17-0071	04/13/17	
	A4	ECN # 17-0252	11/16/17	



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 ISO 9001 CERTIFIED



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

APPROVALS		DATE	TITLE			
DRAWN <i>sfk</i>		10/15/12	PRODUCT FEATURE DTA-0R5G18G-60-CD-1			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	05XQ0	27017781	A4
			SCALE	N:S	SHEET	1 OF 1