

**DESCRIPTION:**

PMI MODEL NUMBER DTA-18G20G-45-8D IS A NON-REFLECTIVE 8 BIT PROGRAMMABLE 45 dB PIN DIODE ATTENUATOR WITH STEP RESOLUTION AS LOW AS 0.25 dB OVER THE FREQUENCY RANGE OF 18 TO 20 GHz. THIS MODEL IS OFFERED IN A SLIM LINE HOUSING MEASURING ONLY 0.5" HEIGHT.

**SPECIFICATIONS:**

- FREQUENCY: \_\_\_\_\_ 18 GHz TO 20 GHz
- MEAN ATTENUATION RANGE: \_\_\_\_\_ 45 dB
- INSERTION LOSS: \_\_\_\_\_ 6.0 dB TYP, 7.0 dB MAX.
- VSWR: \_\_\_\_\_ 2.2 :1 MAX
- FLATNESS UP TO:
  - 10 dB \_\_\_\_\_ ±1 dB TYP
  - 20 dB \_\_\_\_\_ ±1.5 dB TYP
  - 45 dB \_\_\_\_\_ ±2 dB TYP
- ACCURACY OF ATTENUATION:
  - 0 dB TO 10 dB \_\_\_\_\_ ±0.5 dB TYP
  - 10 dB TO 20 dB \_\_\_\_\_ ±0.75 dB TYP
  - 20 dB TO 45 dB \_\_\_\_\_ ±1.0 dB TYP
- REPEATABILITY OF ATTENUATION  
SETTING @ ANY GIVEN TEMPERATURE: \_\_\_\_\_ ±0.2 dB
- MINIMUM ATTENUATION STEP: \_\_\_\_\_ 0.25 dB
- OPERATING POWER: \_\_\_\_\_ 20 dBm TYP, 25dBm GOAL
- SURVIVAL POWER: \_\_\_\_\_ 1W Average from -65°C to +25°C
- SWITCHING TIME:
  - ON TIME (45dB to IL) \_\_\_\_\_ 1.0 us MAX
  - OFF TIME (IL to 45dB) \_\_\_\_\_ 0.5 us MAX
- DC POWER SUPPLY: \_\_\_\_\_ +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, MOUNTING SURFACE UNPAINTED AND GOLD PLATED
- LOGIC INPUT:
  - LOGIC "0" (BIT OFF) \_\_\_\_\_ -0.3 to +0.8V
  - LOGIC "1" (BIT ON) \_\_\_\_\_ +2.0 to +5.0V

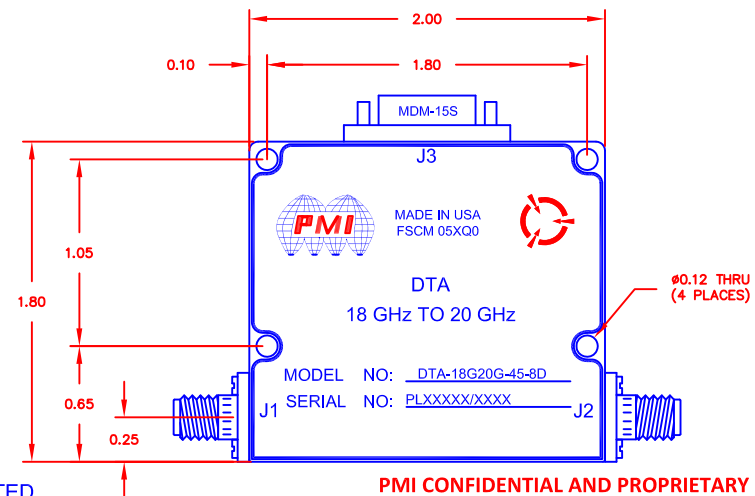
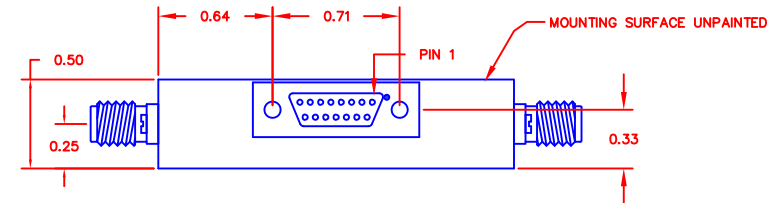
**ENVIRONMENTAL RATINGS:**

- 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 (LSB)
5	GND
6	Not Used
7	Not Used
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
	-	PRELIMINARY	2/7/2017	



PMI CONFIDENTIAL AND PROPRIETARY

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 ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		PRODUCT FEATURE
DRAWN J. PALABJO		2/7/2017	DTA-18G20G-45-8D		PRELIMINARY
CHECKED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	05XQ0	
SCALE N:S			SHEET		1 OF 1

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