

**DESCRIPTION:**

PMI MODEL NUMBER DTA-218-60-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 2.0 TO 18.0 GHz.

**SPECIFICATIONS:**

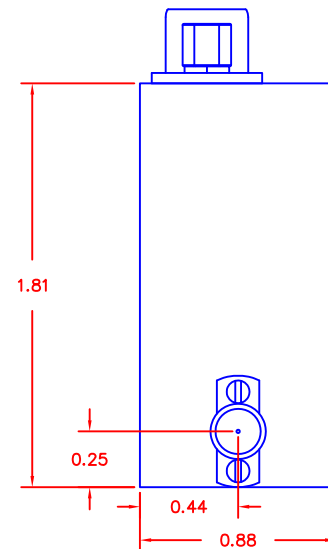
- FREQUENCY: ..... 2 GHz TO 18.0 GHz
- MEAN ATTENUATION RANGE ..... 60dB
- INSERTION LOSS ..... 4.5 dB MAX
- VSWR: ..... 2.0 :1 MAX
- FLATNESS UP TO
  - 20 dB ..... ±1.0 dB TYP
  - 40 dB ..... ±1.25 dB TYP
  - 60 dB ..... ±3.0 dB TYP
- ACCURACY OF ATTENUATION
  - 0 dB TO 20 dB ..... ±1.0 dB TYP
  - 20 dB TO 40 dB ..... ±1.5 dB TYP
  - 40 dB TO 60 dB ..... ±2.0 dB TYP
- MINIMUM ATTENUATION STEP ..... 0.06 dB
- SURVIVAL POWER: ..... 2W Average from -65°C to +25°C
- SWITCHING TIME
  - ON TIME ..... 1.0 usec MAX
  - OFF TIME ..... 0.5 usec MAX
- DC POWER SUPPLY ..... +15V @ 100mA MAX  
 ..... -15V @ 100 mA MAX
- CONNECTORS ..... 2 SMA Female & 15 PIN D-SUB  
 Shipped with Mating D-SUB
- WEIGHT ..... (L) 2.0" X (W) 1.81" X (H) 0.88"
- WEIGHT ..... 3.0 oz (85 gm) Approximate
- FINISH ..... PAINTED GRAY
- LOGIC INPUT
  - LOGIC "0" (BIT OFF) ..... -0.3 to +0.8V
  - LOGIC "1" (BIT ON) ..... +2.0 to +5.0V

**ENVIRONMENTAL RATINGS:**

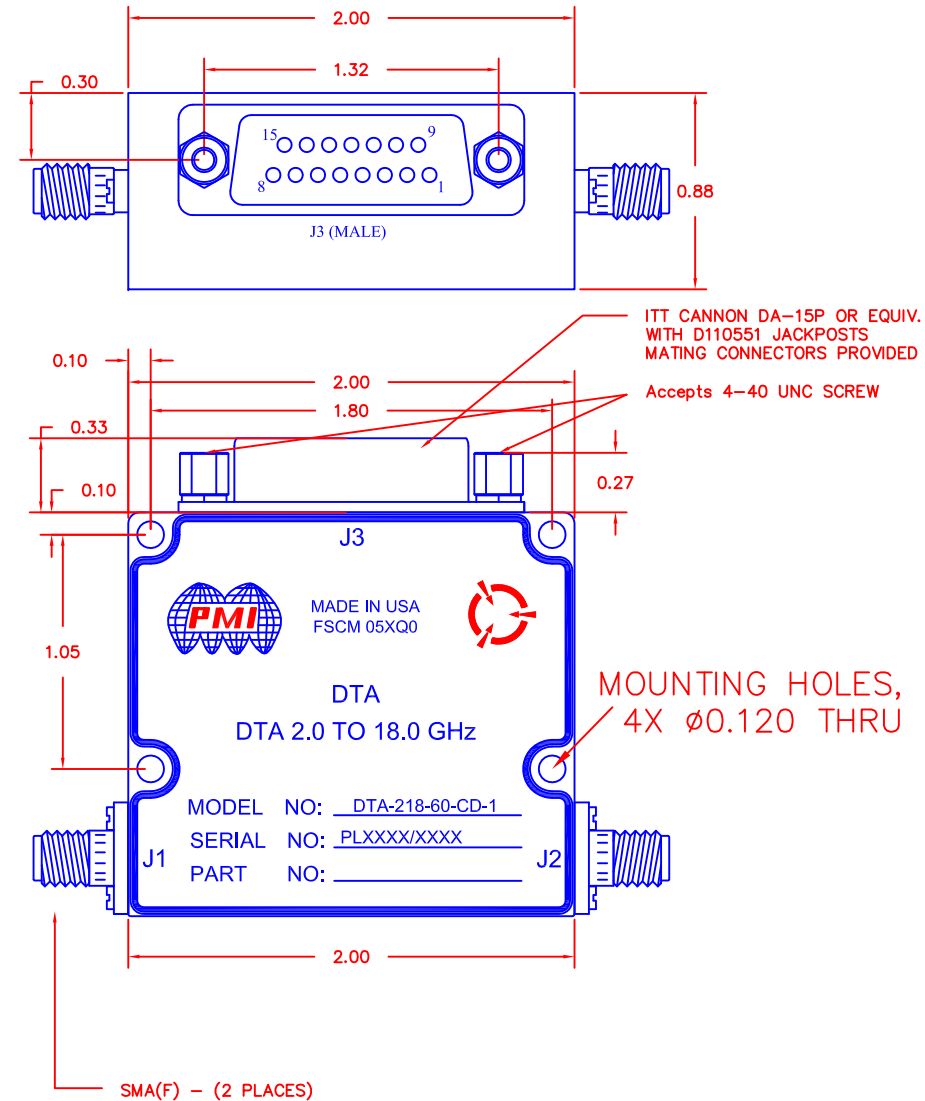
- TEMPERATURE: ..... -50°C TO +100°C (OPERATING)  
 ..... -65°C TO +125°C (STORAGE)
- HUMIDITY: ..... MIL-STD-202F, METHOD 103B COND. B
- SHOCK: ..... MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: ..... MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: ..... MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: ..... MIL-STD-202F, METHOD 107

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PIN NO:	J3 PIN FUNCTIONS
1	GND
2	Not Connected
3	0.13 dB
4	GND
5	0.25 dB
6	0.5 dB
7	1.0 dB
8	2.0 dB
9	4.0 dB
10	8.0 dB
11	16.0 dB
12	32.0 dB (MSB)
13	+V
14	-V
15	0.06 dB (LSB)



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	8/22/11	



**PLANAR MONOLITHICS INDUSTRIES, INC.**  
 7311-F GROVE ROAD  
 FREDERICK, MARYLAND 21704 USA  
 TEL: 301-662-5019 FAX: 301-662-1731  
 WEBSITE: [www.pmi-rf.com](http://www.pmi-rf.com)  
 E-MAIL: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)  
 ISO 9001:2008 CERTIFIED



ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 X.XX ±0.020  
 X.XXX ±0.005

APPROVALS		DATE	TITLE			
DRAWN NJA		8/22/11	PRODUCT FEATURE			
CHECKED			DTA-218-60-CD-1			
ISSUED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27013941	REV. A
			SCALE N:S			SHEET 1 OF 1