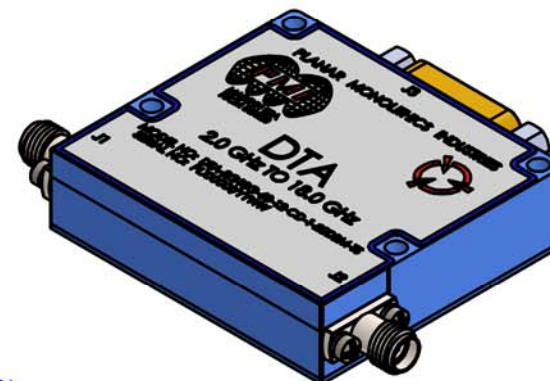


PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER DTA-2G18G-60-12-CD-1-20DBM-TS IS A 12 BIT PROGRAMMABLE 60 dB PIN DIODE ATTENUATOR OVER THE FREQUENCY RANGE OF 2.0 TO 18.0 GHz. THIS MODEL IS OFFERED IN A SLIM LINE HOUSING MEASURING ONLY 0.5" IN HEIGHT.

SPECIFICATIONS:

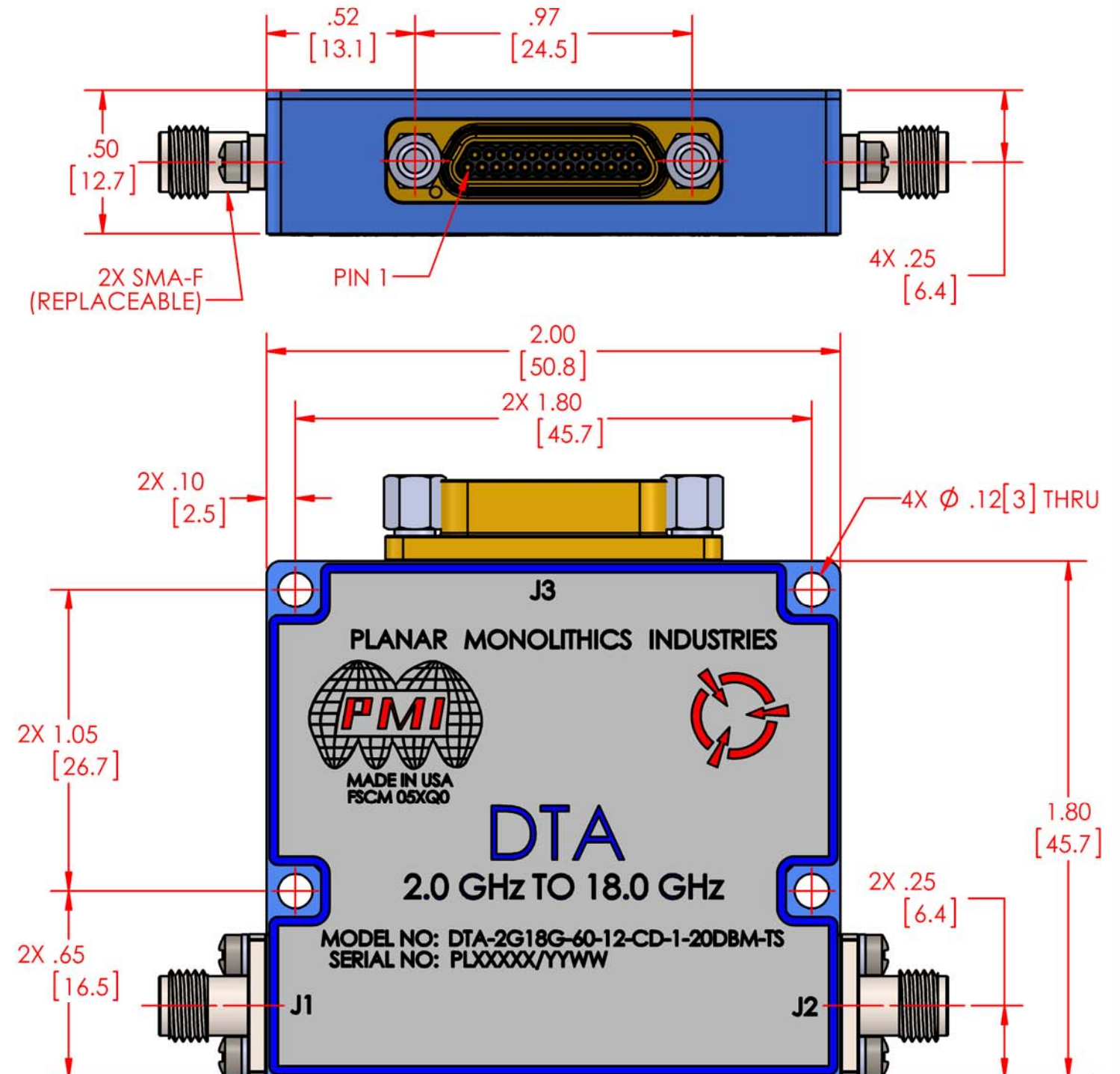
- FREQUENCY RANGE:..... 2.0 GHz TO 18.0 GHz
- MEAN ATTENUATION RANGE:..... 60 dB
- INSERTION LOSS:..... 4.8 dB MAXIMUM
- VSWR:..... 2.0 : 1 MAXIMUM
- FLATNESS UP TO:
  - 20 dB:..... ± 1.0 dB TYPICAL
  - 40 dB:..... ± 1.25 dB TYPICAL
  - 60 dB:..... ± 3.0 dB TYPICAL
- ACCURACY OF ATTENUATION:
  - 20 dB:..... ± 1.0 dB TYPICAL
  - 40 dB:..... ± 1.5 dB TYPICAL
  - 60 dB:..... ± 2.0 dB TYPICAL
- MINIMUM ATTENUATION STEP:..... 0.016 dB
- OPERATING POWER:..... +20 dBm TYPICAL
- SURVIVAL POWER:..... 1W AVERAGE FROM -65°C TO +25°C
- SWITCHING TIME:
  - ON TIME:..... 1.0 us MAXIMUM
  - OFF TIME:..... 0.5 us MAXIMUM
- DC POWER SUPPLY:..... +15V @ 115 ma MAXIMUM
- CONNECTORS:..... 2 SMA & 25 PIN MICRO-D FEMALE
- 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
- TEMP SENSOR:..... 10 mV/°C, 3.0V @ 25°C

| PIN NO. | J3 FUNCTION     |
|---------|-----------------|
| 1       | 2 dB            |
| 2       | 1 dB            |
| 3       | 0.5 dB          |
| 4       | 0.25 dB         |
| 5       | GND             |
| 6       | 0.13 dB         |
| 7       | 0.06 dB         |
| 8       | GND             |
| 9       | NC              |
| 10      | NC              |
| 11      | +VDC            |
| 12      | 32 dB (MSB)     |
| 13      | 16 dB           |
| 14      | 8 dB            |
| 15      | 4 dB            |
| 16      | 0.03 dB         |
| 17      | 0.016 dB (LSB)  |
| 18      | NC              |
| 19      | NC              |
| 20      | NC              |
| 21      | NC              |
| 22      | NC              |
| 23      | NC              |
| 24      | TEMP SENSOR     |
| 25      | TEMP SENSOR RTN |



- TEMPERATURE:..... +10°C TO +50°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202G, METHOD 103B COND. B
- SHOCK:..... MIL-STD-202G, METHOD 213B COND. B
- VIBRATION:..... MIL-STD-202G, METHOD 204D COND. B
- ALTITUDE:..... MIL-STD-202G, METHOD 105C COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202G, METHOD 107D COND. A

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION



|                                                                                       |                                                                                                                                                               |           |                                                                                                                                                                                                                                                                                                          |           |                   |                     |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------|---------------------|
|  |                                                                                                                                                               |           | <b>PLANAR MONOLITHICS INDUSTRIES, INC.</b><br> 7311-F GROVE ROAD<br>FREDERICK, MARYLAND 21704 USA<br>TEL: (301)-662-5019, FAX: (301)-662-1731<br>WEB: www.pmi-ri.com, EMAIL: sales@pmi-ri.com<br>ISO 9001 CERTIFIED |           |                   |                     |
|                                                                                       | APPROVALS                                                                                                                                                     | DATE      | TITLE<br><b>OUTLINE</b><br><b>DTA-2G18G-60-12-CD-1-20DBM-TS</b>                                                                                                                                                                                                                                          |           |                   |                     |
|                                                                                       | DRAWN<br><b>M. HANKEN</b><br>REDRAWN                                                                                                                          | 5/16/2018 |                                                                                                                                                                                                                                                                                                          |           |                   |                     |
|                                                                                       | UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>TOLERANCES ARE:<br>FRACTIONS    DECIMALS    ANGLES<br>$\pm$ .XX $\pm$ 0.02 $\pm$<br>.XXX $\pm$ 0.01 | ISSUED    |                                                                                                                                                                                                                                                                                                          | SIZE<br>B | FSCM NO.<br>05XQ0 | DWG NO.<br>27035080 |
|                                                                                       |                                                                                                                                                               |           | SCALE 2:1                                                                                                                                                                                                                                                                                                |           | SHEET 1 OF 1      |                     |