

| REVISIONS |      |                  |        |          |
|-----------|------|------------------|--------|----------|
| ZONE      | REV. | DESCRIPTION      | DATE   | APPROVED |
|           | A    | Original Release | 5/5/11 |          |

**DESCRIPTION:**

PMI model number PIA-BTFL-GPO-2CH is an dual channel integrated assembly that consists of a Bias-Tee, High Pass Filter, and Limiter. This compact module is supplied with field replaceable GPO connectors. The module is designed to be supplied either in hermetic or non-hermetic form. Order Option -HERM for hermetically sealed version.

**SPECIFICATIONS:**

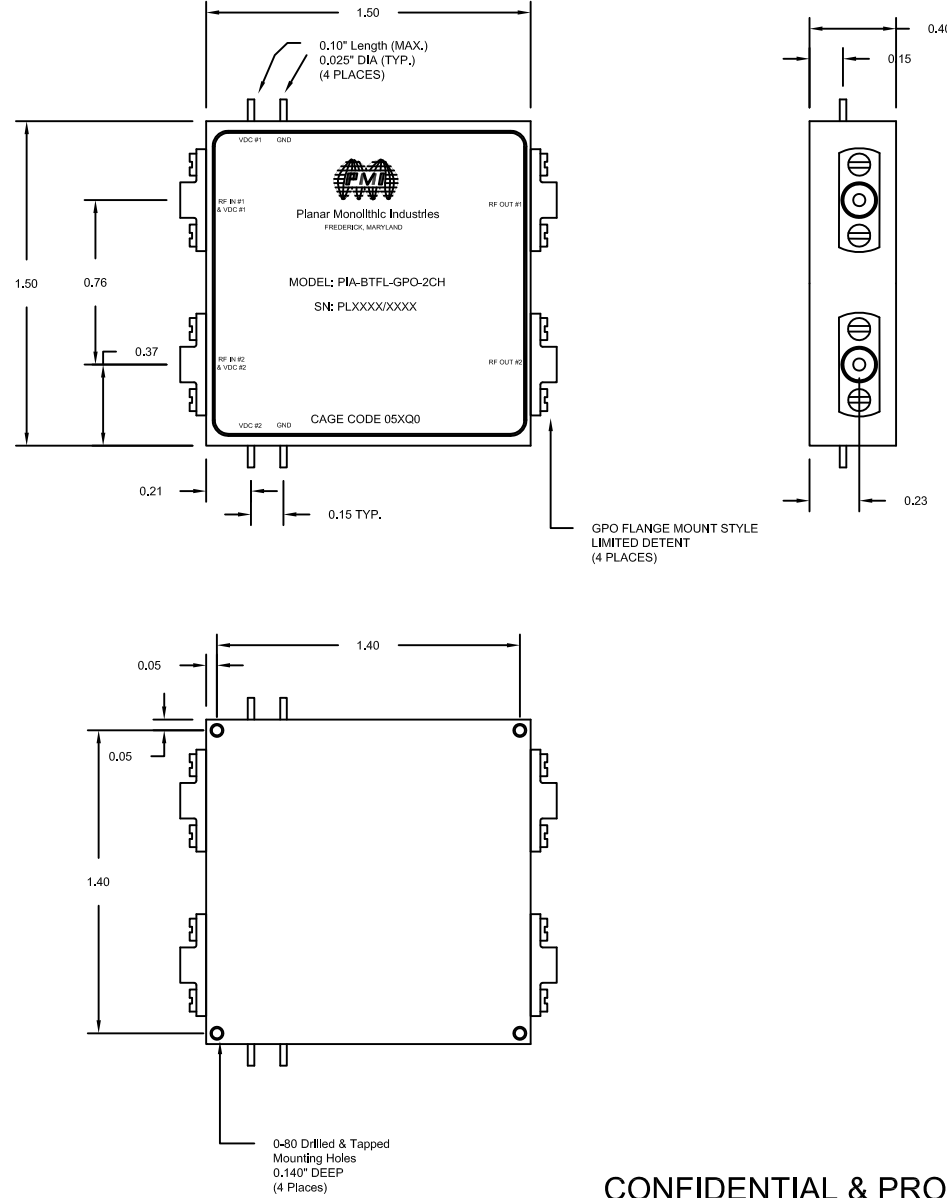
- Passband Lower Limit: \_\_\_\_\_ 2.0GHz Typical
- Passband Upper Limit: \_\_\_\_\_ 19.0GHz Min.
- -3dB Cut-off: \_\_\_\_\_ 1.85GHz Typ.
- Insertion Loss: \_\_\_\_\_ 1.85dB Goal, 2.5dB Max.
- Rejection: \_\_\_\_\_ -15dB Min. @ 1.7GHz  
 \_\_\_\_\_ -20dB Min. @ DC to 1.5GHz
- Passband VSWR: \_\_\_\_\_ 1.5:1 Goal, 2.0:1 Max.
- Bias Rise/Fall Time: \_\_\_\_\_ 50ns Max.  
 (90% to 10%) +12 to -12V or -12 to +12V pules; tr=1ns; Rload=430 Ohms)
- Limiting Threshold: \_\_\_\_\_ +8dBm Min.
- Flat Leakage: \_\_\_\_\_ +20dBm CW Max.  
 \_\_\_\_\_ +23dBm Pulsed Max.
- Pulse Recovery Time: \_\_\_\_\_ 50ns Max. (To within 1dB of IL)
- Power Handling: \_\_\_\_\_ 2W CW Max.  
 \_\_\_\_\_ 50W (12us max. PW, 1% Duty Cucle)
- Bias Current: \_\_\_\_\_ +/-30mA Operational (+/-40mA Max.)
- Bias Voltage: \_\_\_\_\_ -12 to +12VDC
- Connectors: \_\_\_\_\_ GPO - Limited Detent
- Size: \_\_\_\_\_ 1.5" (L) x 1.5" (W) x 0.4" (H)
- Finish: \_\_\_\_\_ MIL-SPEC Epoxy Paint - GRAY  
 (Mounting surface to be free of paint)
- Sealing: \_\_\_\_\_ Epoxy Sealed
- Weight: \_\_\_\_\_ 3oz Typ.

**OPTIONS:**

- Hermetic Sealing: \_\_\_\_\_ Add (-HERM) to Model Number

**ENVIRONMENTAL RATINGS: (With -HERM Option)**

- TEMPERATURE: \_\_\_\_\_ -40°C TO +55°C (OPERATING)  
 \_\_\_\_\_ -65°C TO +125°C (STORAGE)  
 \_\_\_\_\_ +25°C (SPEC)
- HUMIDITY: \_\_\_\_\_ MIL-STD-202F, METHOD 103B COND. B
- SHOCK: \_\_\_\_\_ MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: \_\_\_\_\_ MIL-STD-202F, METHOD 204D COND. B
- TEMPERATURE CYCLE: \_\_\_\_\_ MIL-STD-202F, METHOD 107
- SALT FOG \_\_\_\_\_ MIL-STD-202F, METHOD 101D-EST COND. B
- THERMAL SHOCK \_\_\_\_\_ MIL-STD-202F, METHOD 107D COND. A



ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 X.XX ±0.010  
 X.XXX ±0.005

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|           |        |  |              |
|-----------|--------|--|--------------|
| PART NO.  |        | PLANAR MONOLITHICS INDUSTRIES<br>FREDERICK, MARYLAND |              |
| APPROVALS | DATE   | TITLE  |              |
| DRAWN KM  | 5/5/11 | PRODUCT FEATURE<br>MODEL: PIA-BTFL-GPO-2CH           |              |
| CHECKED   |        | SIZE   | REV.         |
| ISSUED    |        | A 05XQ0  | A            |
|           |        | FSCM NO. 27014741                                    | DWG NO.      |
|           |        | SCALE N/A  | SHEET 1 OF 1 |