

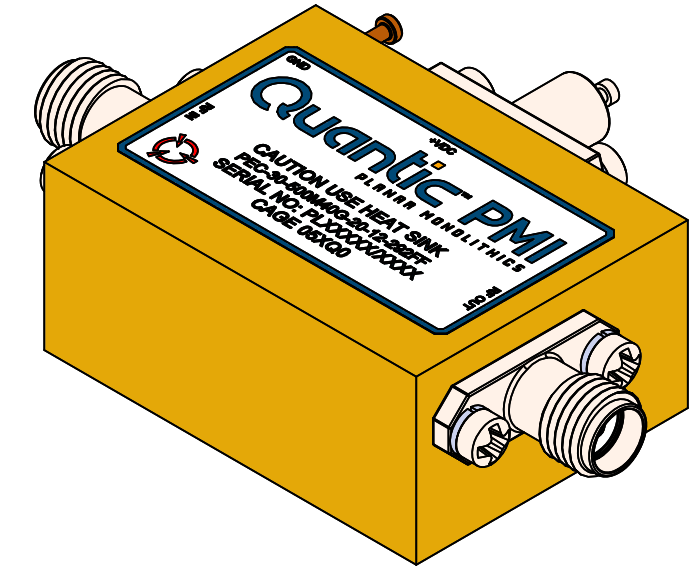
**DESCRIPTION:**

PMI MODEL NUMBER PEC-30-500M40G-20-12-292FF IS A 500 MHz TO 40 GHz LOW NOISE AMPLIFIER. THIS AMPLIFIER HAS A GAIN OF 30 dB WITH ±2.5 dB FLATNESS.

| ZONE | REV. | DESCRIPTION      | DATE     | APPROVED |
|------|------|------------------|----------|----------|
|      | 1    | ORIGINAL RELEASE | 06/15/17 |          |
|      | A1   | ECN # 23-0084    | 05/01/23 |          |
|      | A2   | ECN # 25-0001    | 03/18/25 |          |

**SPECIFICATIONS:**

- FREQUENCY RANGE:..... 0.5 TO 40 GHz
- GAIN:..... 30 dB TYP
- GAIN FLATNESS:..... ±2.5 dB TYP
- NOISE FIGURE:..... 5.5 dB TYP (UP TO 20 GHz)
- OP1dB:..... +19 dBm TYP (0.5 TO 18 GHz)  
+17 dBm TYP (18 GHz TO 40 GHz)
- PSAT:..... +23 dBm TYP (0.5 MHz TO 18 GHz)  
+20 dBm TYP (18 GHz TO 40 GHz)
- INPUT POWER HANDLING:..... +17 dBm CW MAX
- VSWR (INPUT/OUTPUT):..... 2.0:1 MAX (INPUT)  
2.5:1 MAX (OUTPUT)
- DC VOLTAGE SUPPLY:..... +12 TO +15 VDC
- DC CURRENT DRAW:..... 350 mA NOMINAL
- CONNECTORS (INPUT/OUTPUT):..... 2.92mm (F)
- FINISH:..... GOLD PLATED



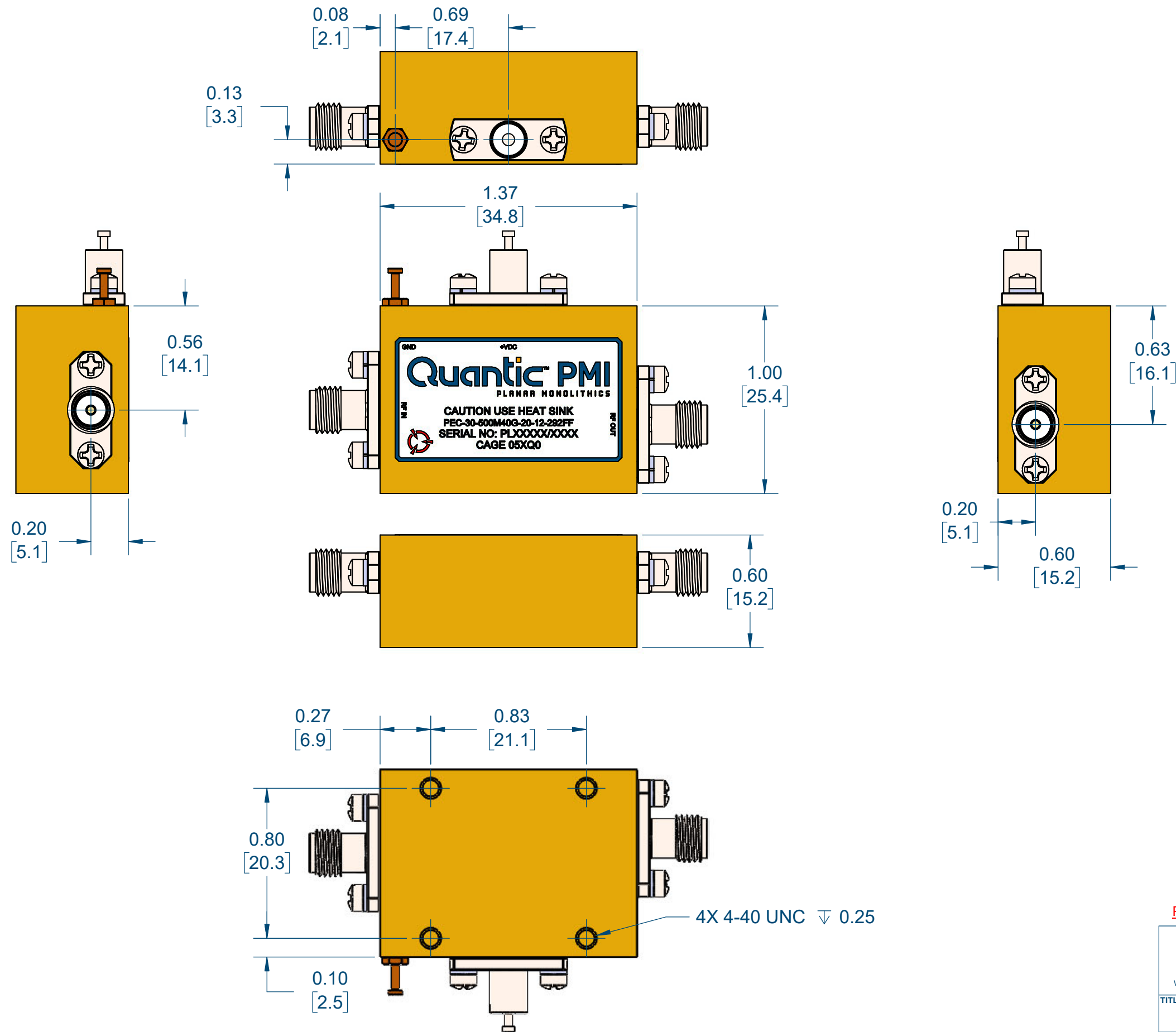
**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:..... -55°C TO +85°C (OPERATING)  
-65°C TO +117°C (STORAGE)
- HUMIDITY:..... MIL-STD-202, METHOD 103B COND. B
- SHOCK:..... MIL-STD-202, METHOD 213B COND. B
- VIBRATION:..... MIL-STD-202, METHOD 204D COND. B
- ALTITUDE:..... MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 107D COND. A

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NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

|   |  |                                    |          |  |              |          |  |
|---|--|------------------------------------|----------|--|--------------|----------|--|
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>TOLERANCES ARE:<br>FRACTIONS DECIMALS ANGLES<br>± .XX ± 0.02 ±<br>.XXX ± 0.01 |  | APPROVALS                          | DATE     | <b>Quantic PMI</b><br>PLANAR MONOLITHICS<br>7309-A GROVE ROAD FREDERICK MARYLAND 21704 USA<br>TEL: (301) 662-5019, FAX: (301) 662-1731<br>WEB: WWW.QUANTICPMI.COM, EMAIL: SALES@QUANTICPMI.COM<br>ISO 9001 CERTIFIED |              |          |  |
|   |  | DRAWN<br><b>R. SIRK</b><br>REDRAWN | 03/18/25 |  |              |          | TITLE<br>OUTLINE<br>PEC-30-500M40G-20-12-292FF |
|   |  | ISSUED                             |          | SIZE   | FSCM NO.     | DWG NO.  | REV.   |
|   |  |                                    |          | B  | 05XQ0        | 27032861 | A2   |
|   |  | SCALE 2:1                          |          |  | SHEET 1 OF 2 |          |  |



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|   |          |                            |              |
|---|----------|----------------------------|--------------|
| <b>Quantic PMI</b><br>PLANAR MONOLITHICS  |          |                            |              |
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| TITLE   |          | OUTLINE                    |              |
|   |          | PEC-30-500M40G-20-12-292FF |              |
| SIZE  | FSCM NO. | DWG NO.                    | REV.         |
| B   | 05XQ0    | 27032861                   | A2           |
| SCALE 2:1   |          |                            | SHEET 2 OF 2 |