### **DESCRIPTION**

PMI MODEL: PEC-42-1G40G-20-12-292FF-BT IS A 1 GHz TO 40 GHz LOW NOISE AMPLIFIER THAT HAS A TYPICAL GAIN OF 40 dB WHILE MAINTAINING A ±2.5 dB FLATNESS, BIAS CAN BE APPLIED VIA THE OUTPUT RF CONNECTOR OR DC PIN AND COMES IN A SMALL 1.37" x 1.00" x 0.60" PACKAGE OUTFITTED WITH 2.92 mm FEMALE CONNECTORS.

#### REVISIONS ZONE DESCRIPTION APPROVED **A1** 10/2/20 **ORIGINAL RELEASE**

**MECHANICAL OUTLINE** 

## **SPECIFICATIONS**

• FREQUENCY RANGE: ------ 1 GHz TO 40.0 GHz

GAIN: ----- 40 dB TYP / (34 dB MIN)

GAIN FLATNESS: ----- ±2.5 dB TYP

NOISE FIGURE: ----- 5.5 dB TYP (UP TO 26.5 GHz)

OP1dB: ----- +19 dBm TYP (1.0 TO 18.0 GHz) +17 dBm TYP (18.0 TO 40.0 GHz)

PSAT: ------+23 dBm TYP (1.0 TO 18.0 GHz)

+20 dBm TYP (18,0 TO 40,0 GHz)

INPUT POWER HANDLING: ----- +17 dBm CW MAX

VSWR (IN/OUT): ----- 2.0:1 / 2.5:1 MAX

DC SUPPLY (DC PIN OR RF OUT): ----- +12 TO +15 VDC @ 550 mA NOM

SIZE: ----- 1.37" (L) x 1.00" (W) x 0.60" (H)

CONNECTORS: ----- 2.92 mm FEMALE

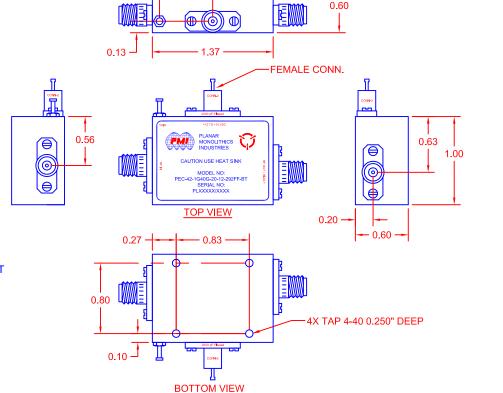
PAINTED BLUE, MOUNTING SURFACE FREE OF PAINT (GOLD FINISH) FOR PROPER HEAT

DISSIPATION

SEALING: ----- HARD CONDUCTIVE EPOXY SEAL COMES

STANDARD AND HERMETIC SEAL UPON

**REQUEST** 



– 0.68 <del>– -</del>

0.08 -

# **ENVIRONMENTAL RATINGS**

• TEMPERATURE: ----- -55 °C TO +85 °C (OPERATING) -65 °C TO +117 °C (STORAGE) HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B

SHOCK: ------ MJL-STD-202, METHOD 213B COND. B

VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B

----- MIL-STD-202, METHOD 105C COND. B ALTITUDE: ----

TEMPERATURE CYCLE: ----- MIL-STD-202, METHOD 107D COND. A

TOLERANCES: X XXX

ALL DIMENSIONS ARE IN INCHES (mm) ±0.020 +0.010

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

PMI CONFIDENTIAL AND PROPRIETARY