### **DESCRIPTION:**

PLANAR MONOLITHICS INDUSTRIES MODEL NO: PEC-12-50M40G-4R0-15-292FF IS AN AMPLIFIER OPERATING OVER THE 50 MHz TO 40 GHz FREQUENCY RANGE. THIS MODEL OFFERS A GAIN OF 10 db minimum while maintaining a maximum flatness of ±2.5 db.

# ZONE REV. DESCRIPTION DATE APPROVED A1 ORIGINAL RELEASE 10/7/24 B1 ECN # 24-0294 10/17/24 C1 ECN # 25-0137 5/6/25

## **SPECIFICATIONS:**

FREQUENCY RANGE:	. 50 MHz TO 40.0 GHz
• GAIN:	. +10 dB MINIMUM
• FLATNESS:	±2.5 dB MAXIMUM
NOISE FIGURE:	. 8.5 dB MAXIMUM [0.05 GHz TO 0.5 GHz]
	5.5 dB MAXIMUM [0.5 GHz TO 31 GHz]
	8.5 dB MAXIMUM [31 GHz TO 40 GHz]
P1dB COMPRESSION:	. +13 dBm MINIMUM
• VSWR IN:	
VSWR OUT:	. 2.8:1 MAXIMUM [0.05 GHz TO 35 GHz]
	3.3:1 MAXIMUM [35 GHz TO 40 GHz]
POWER SUPPLY:	+12 VDC (±5%) @ 300 mA MAX
CONNECTORS:	. 2.92 mm FEMALE
• SIZE:	0.83" x 0.75" x 0.37"
	21.2 mm x 19.1 mm x 9.3 mm

• FINISH: PAINTED BLUE

# 0.71 0.19 [18.1] 4.7 0.25 6.4 -4X 2-56 UNC - 2B $\mp$ 0.13[3.3]0.42 10.6 0.13 0.83 [3.3][21.2] 0.14 0.27 0.14 3.6 6.8 3.6 0.75 [19.1] 0.31 [7.9] 7.9

# **ENVIRONMENTAL RATINGS:**

TEMPERATURE:	0°C TO +85°C (OPERATING)
	-65°C TO +125°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:	

NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

#### PMI CONFIDENTIAL AND PROPRIETARY

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	APPROVALS	DATE	w	TEL: (301) 662-5019, FAX: (301) 662-1731 WEB: WWW.QUANTICPMI.COM, EMAIL: SALES@QUANTICPN ISO 9001 CERTIFIED				иі.сом
	D. HOSCHAR	10/17/24	TITLE			Outline		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± JXX ± 0.02 ± JXXX ± 0.01	REDRAWN			PEC-12-50M40G-4R0-15-292FF				
	ISSUED		SIZE	FSCI	M NO.	DWG NO.		REV.
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