

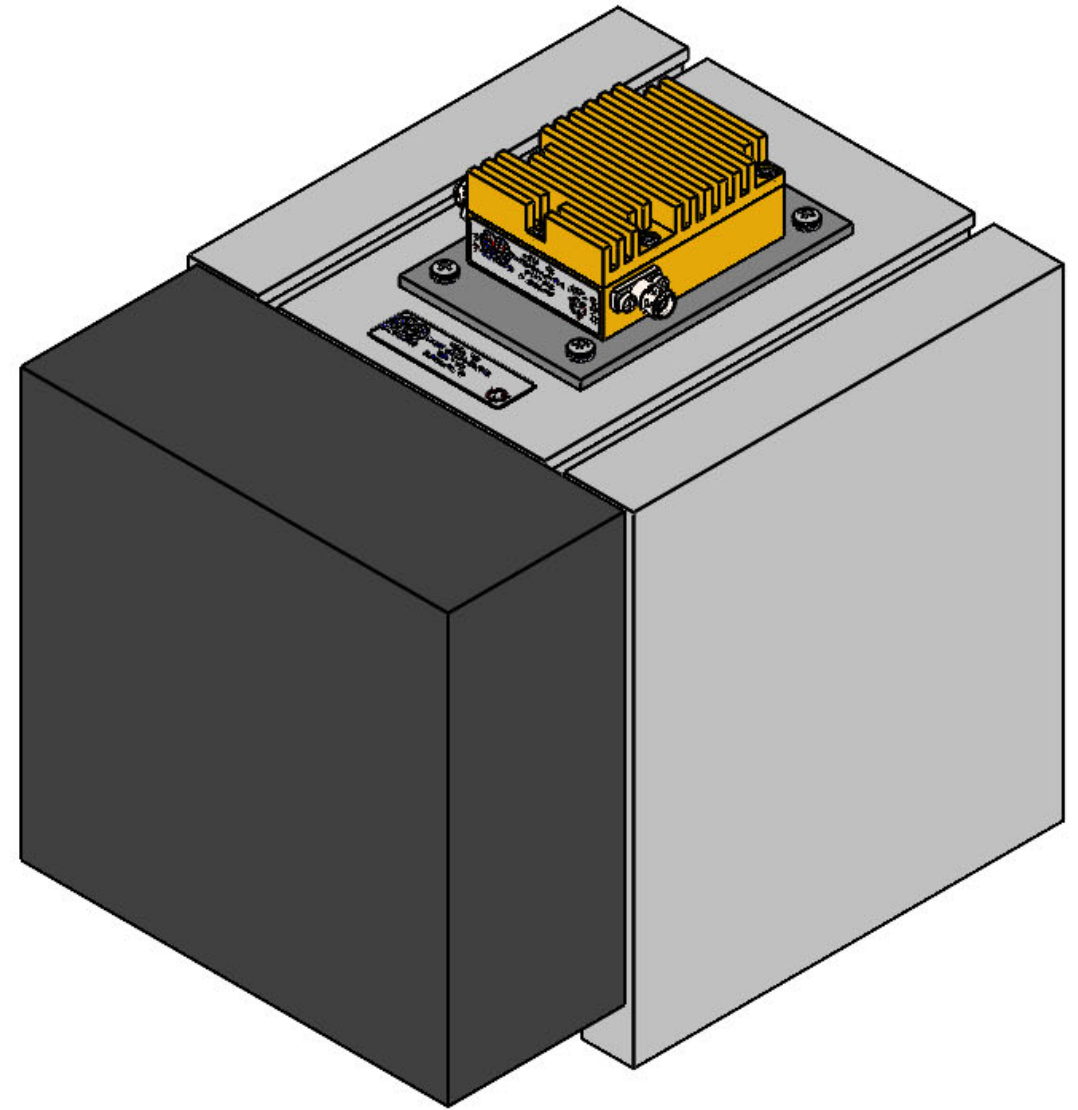
**DESCRIPTION:**

PMI MODEL NUMBER PA-8G12G-43-5-40-SFF-HS IS A HIGH POWER AMPLIFIER WITH AN OPERATING FREQUENCY OF 8 TO 12 GHz, 43 dB GAIN AND SATURATED OUTPUT POWER OF 40 dBm.

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	9/22/22	
	A4	ECN # 24-0362	12/23/2024	
	A5	ECN # 25-0051	3/6/2025	

**SPECIFICATIONS:**

- FREQUENCY RANGE:..... 8.0 TO 12.0 GHz
- GAIN:..... 43 dB TYP  
40 dB MIN
- VSWR (INPUT/OUTPUT):..... 2.0 : 1 MAX
- NOISE FIGURE:..... 5.0 dB MAX
- PSAT:..... 40 dBm (10W) TYP  
37 dBm MIN
- INPUT POWER:..... 20 dBm MAX
- SUPPLY\*:..... +22 VDC MAX
- POWER AMP CONTROL (ENABLE):..... "1" = +3V ON  
"0" = 0 V OFF
- CONNECTORS:..... SMA FEMALE REMOVEABLE
- FINISH:..... GOLD PLATED
- OPTION:..... UNIT WITHOUT HEATSINK:  
PA-8G12G-43-5-40-SFF
- HEATSINK POWER SUPPLY:..... 120VAC/60Hz (POWER CORD SUPPLIED)



Typical Current	
Quiescent current and maximum current	
<b>-40°C</b>	
-30 dBm Input Power	1,860 mA
+20 dBm Input Power	2,550 mA
<b>+25°C</b>	
-30 dBm Input Power	2,150 mA
+20 dBm Input Power	3,200 mA
<b>+85°C</b>	
-30 dBm Input Power	2,400 mA
+20 dBm Input Power	3,300 mA


\*LOWER VOLTAGE WILL RESULT IN LOWER PSAT. GAIN WILL STAY CONSTANT DOWN TO +20 VDC.

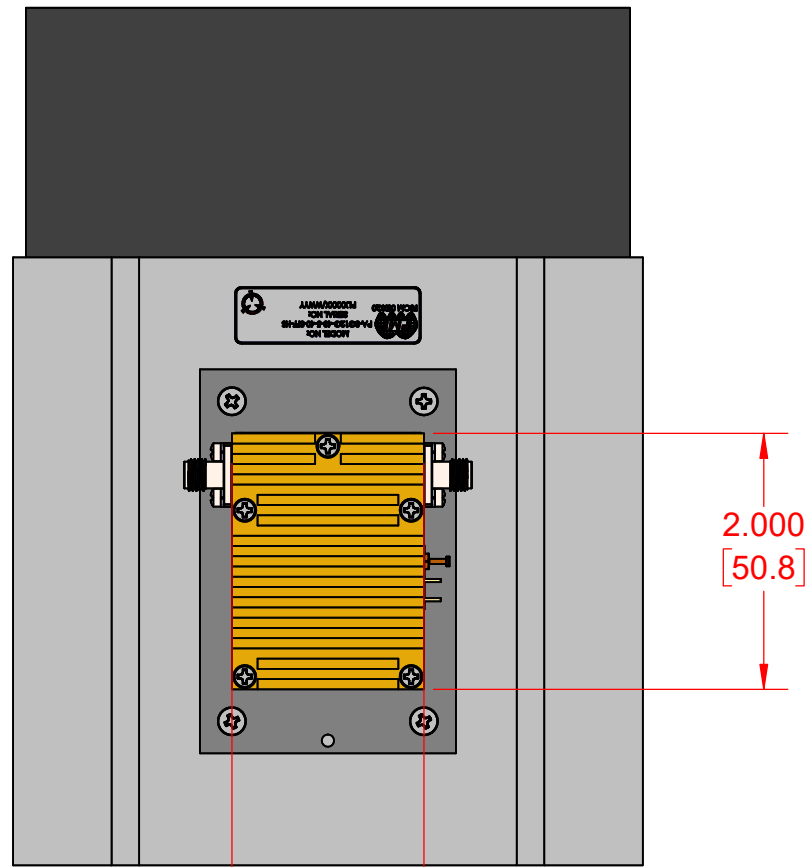
**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:..... -40°C TO +85°C (OPERATING)  
-55°C TO +125°C (STORAGE)

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± .XXX ± 0.01		APPROVALS DATE DRAWN R. SIRK 9/22/2022 REDRAWN ISSUED		PLANAR MONOLITHICS INDUSTRIES, INC.  7311-F GROVE ROAD FREDERICK, MARYLAND 21704 USA TEL: (301)-862-5019, FAX: (301)-662-1731 WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com ISO 9001 CERTIFIED	
		TITLE OUTLINE PA-8G12G-43-5-40-SFF-HS		SIZE B FSCM NO. 05XQ0 DWG NO. 27045140 SCALE 1:4	REV. A5 SHEET 1 OF 2



2.000  
[50.8]

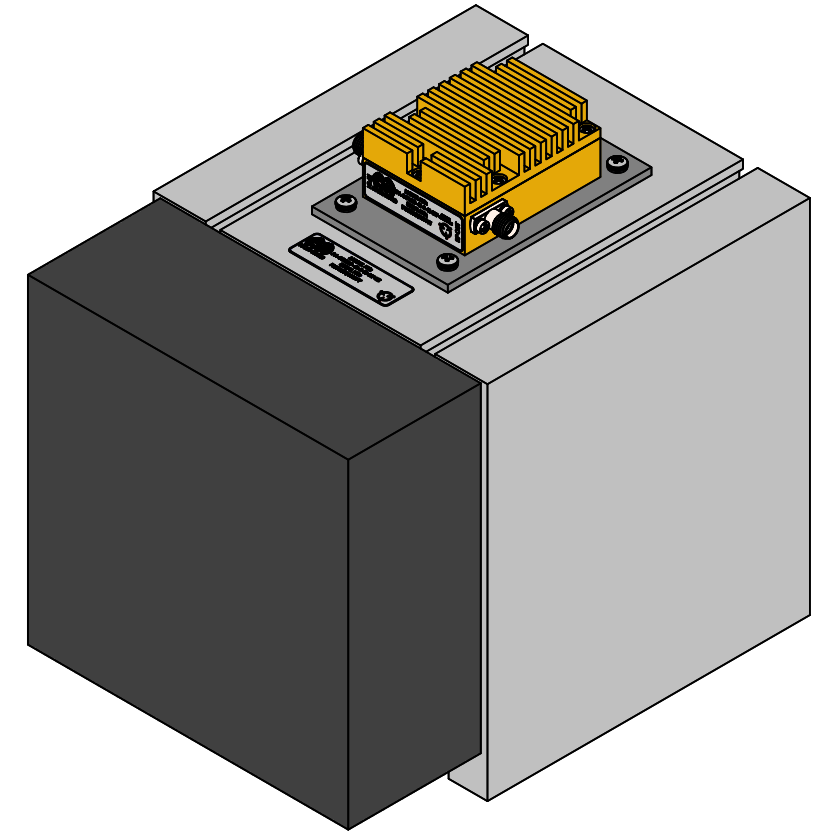
0.875  
[22.2]

1.500  
[38.1]

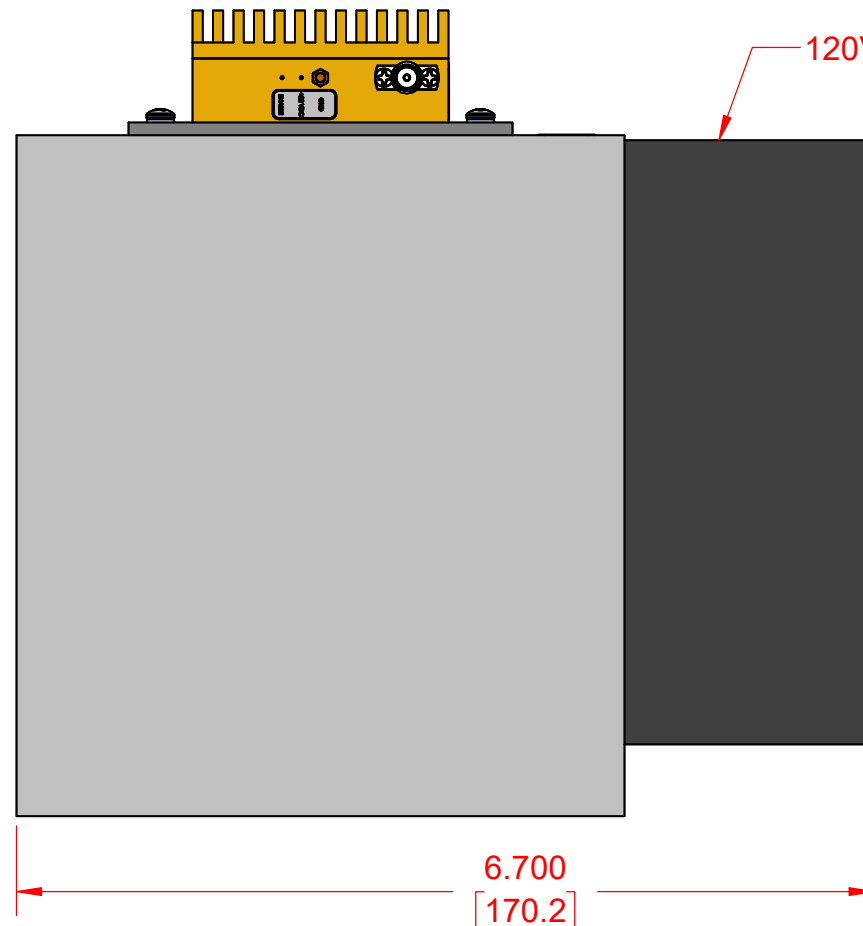
5.320  
[135.1]

6.295  
[159.9]

4.920  
[125]



120VAC FAN



6.700  
[170.2]

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APPROVALS		DATE	TITLE			
DRAWN	R. SIRK	9/22/2022	OUTLINE			
REDRAWN			PA-8G12G-43-5-40-SFF-HS			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			B	05XQ0	27045140	A5
			SCALE 1:4			SHEET 2 OF 2

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
TOLERANCES ARE:  
FRACTIONS .XX ± 0.02 ANGLES ±  
± .XXX ± 0.01