

DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER SDLVA-2G18G-50MV-100-NRF-2 IS A SUCCESSIVE DETECTION LOGARITHMIC VIDEO AMPLIFIER (SDLVA) DESIGNED TO OPERATE OVER THE 2 GHz TO 18 GHz FREQUENCY RANGE. THIS MODEL IS DESIGNED FOR ULTRA HIGH SPEED APPLICATIONS WHILE MAINTAINING FLATNESS AND ACCURACY.

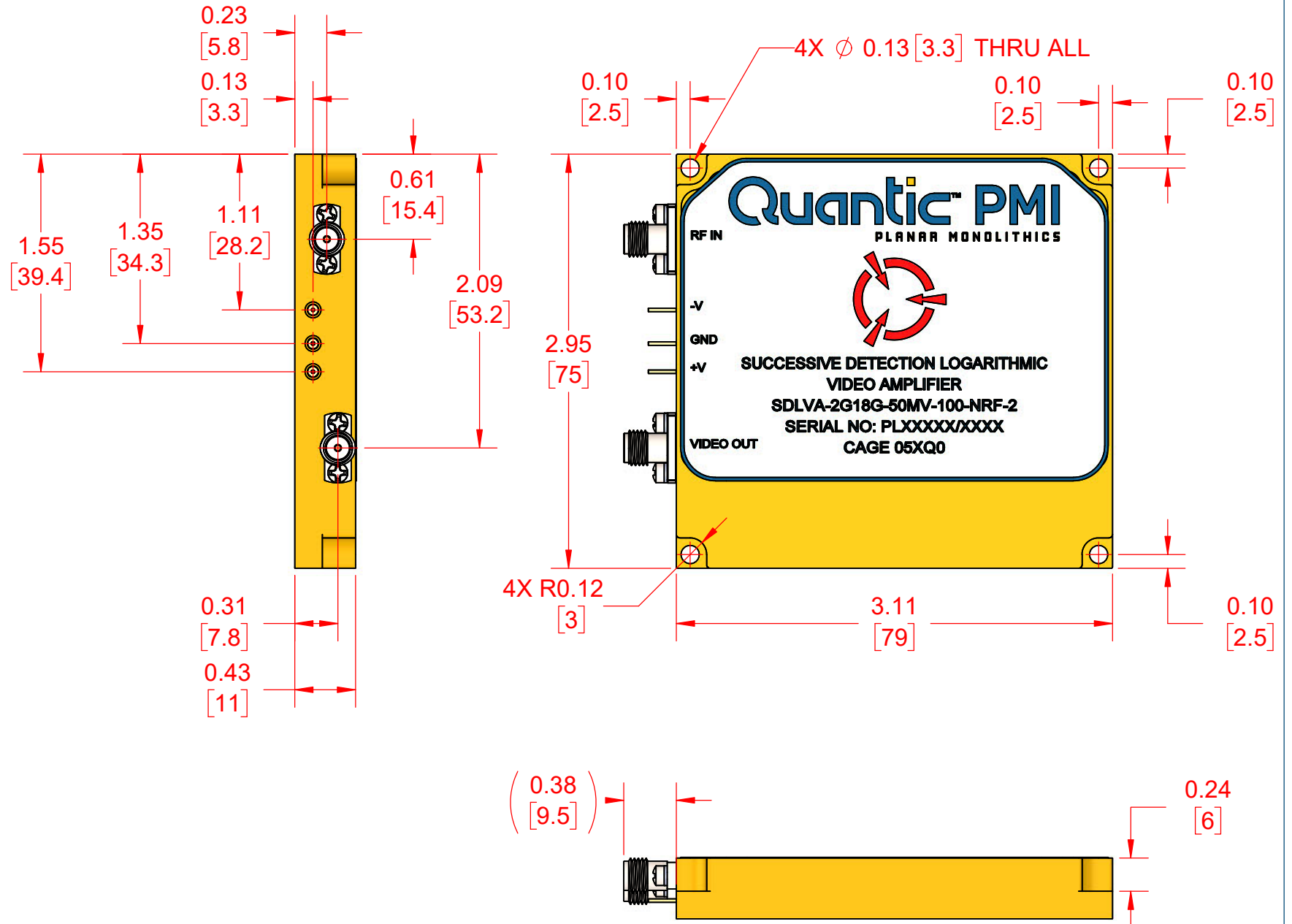
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	10/31/2024	
	A2	ECN # 25-0225	8/5/2025	

SPECIFICATIONS:

- FREQUENCY:..... 2.0 GHz TO 18.0 GHz
- FLATNESS:..... ± 2.0 dB MAX
- TSS:..... -69 dBm MIN
- VSWR:..... 2.0:1 MAX (RF INPUT)
- POWER INPUT:..... +17 dBm CW MAX
- LOG SLOPE:..... 50 mV/dB (± 1.5 mV) 100 Ω LOAD
- LOG RANGE:..... -67 TO +5 dBm
- LOG LINEARITY:..... ± 1.0 dB (25°C)
± 1.35 dB (-30°C / +65°C)
- LOG REF LINE:..... FROM 200 mV @ -67 dBm TO
3800 mV @ +5 dBm, WITH A
50 mV/dB LOG SLOPE
- LOG OFFSET:..... 0 mV ± 100 mV
- PULSE RANGE:..... 30 ns TO CW
- RISE TIME:..... 10 ns MAX, 6 ns TYP
- FALL TIME:..... 40 ns TYP
- RECOVERY TIME:..... 60 ns TYP
- POWER SUPPLY:..... +15 V OR +12 V @ 350 mA NOM
-15 V OR -12 V @ 180 mA NOM
- CONNECTORS:..... SMA FEMALE
- SEALING:..... HARD CONDUCTIVE EPOXY
- FINISH:..... GOLD PLATED

ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -30°C TO +65°C (OPERATING)
-65°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202F, METHOD 103B COND. B
- SHOCK:..... MIL-STD-202F, METHOD 213B COND. B
- VIBRATION:..... MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE:..... MIL-STD-202F, METHOD 105C COND. B
- SALT ATMOSPHERE:..... MIL-STD-202G, METHOD 101E COND. C
- FUNGUS:..... MIL-STD-810C, METHOD 508.2
- TEMPERATURE CYCLE:..... MIL-STD-202F, METHOD 107D, COND. A
- ELECTROMAGNETIC COMPATIBILITY:..... MODULE DESIGN SHALL BE BASED ON THE REQUIREMENTS STATED IN MIL-STD-461D CLASS A3 AND OPERATE IN THE ENVIRONMENT STATED IN THE REQUIREMENTS MIL-STD-462 (MEASUREMENT OF ELECTROMAGNETIC INTERFERENCE CHARACTERISTICS)



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

PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS DRAWN J ESCANO REDRAWN ISSUED		DATE	TITLE OUTLINE SDLVA-2G18G-50MV-100-NRF-2			
		10/31/2024	SIZE	FSCM NO.	DWG NO.	REV.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± .XXX ± 0.01			B	05XQ0	27050000	A2
		SCALE	1:1			SHEET 1 OF 1

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