

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	11/1/2022	

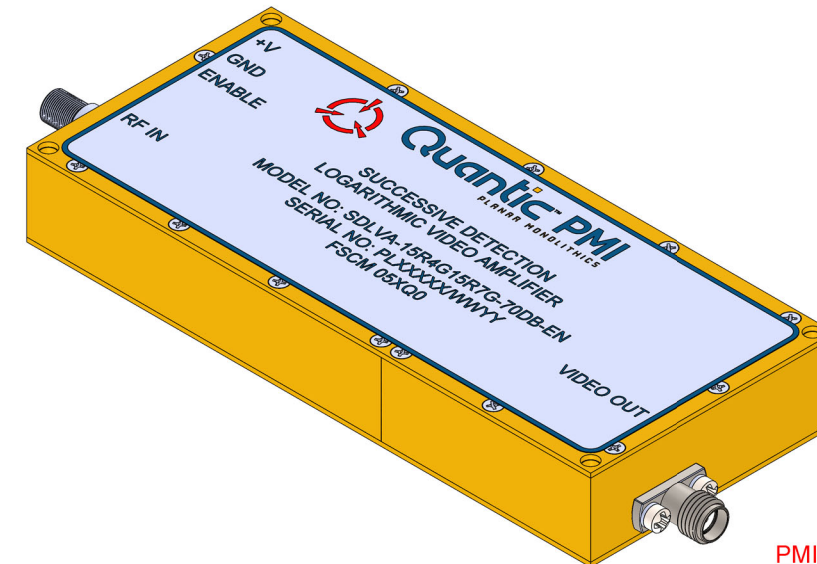
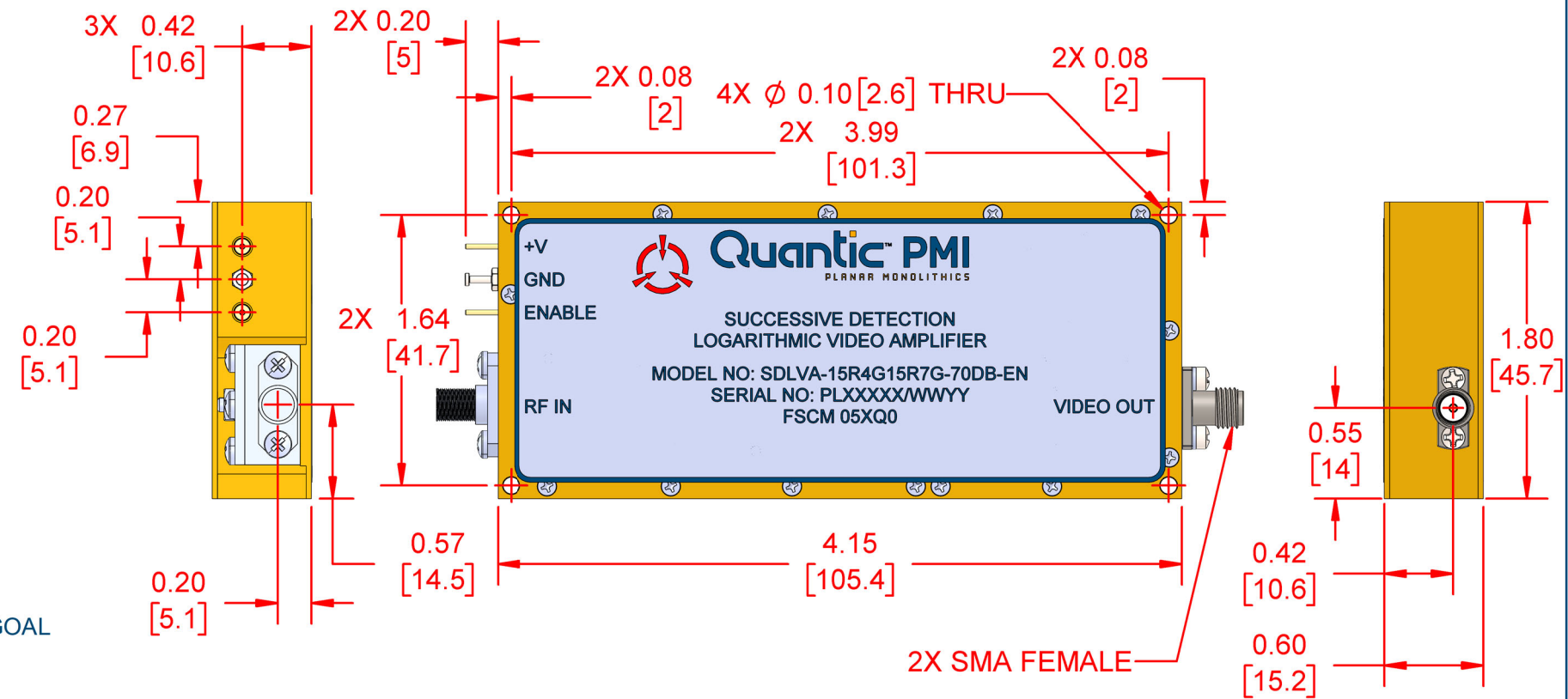
DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER SDLVA-15R4G15R7G-70DB-EN IS AN SDLVA (SUCCESSIVE DETECTION LOGRITHMIC VIDEO AMPLIFIER) DESIGNED TO OPERATE OVER THE 15.4GHz TO 15.7GHz FREQUENCY RANGE WITH 70 dB DYNAMIC RANGE. THIS SDLVA HAS AN INPUT RF FILTER TO LIMIT RF BANDWIDTH AND AN ENABLE PIN ALLOWING A STANDBY MODE TO REDUCE POWER CONSUMPTION FOR BATTERY POWERED APPLICATIONS.

MECHANICAL OUTLINE

SPECIFICATIONS:

- FREQUENCY RANGE:..... 15.4 TO 15.7 GHz
- FILTER REJECTION 30dBc:..... DC TO 14.4GHz & 16.7 TO 20GHz
- TSS:..... -74dBm MIN
- VSWR:..... 2.5:1 MAX
- VIDEO OUTPUT RANGE:..... 0VDC TO 2.2VDC INTO A 50Ω LOAD
- MAX VIDEO OUTPUT:..... 2.4VDC
- INPUT POWER:..... +15dBm CW MAX
- LOG RANGE:..... -70dBm TO 0dBm
- LOG SLOPE :..... 15mV/dB (±10%) @ 50Ω LOAD
- LOG SLOPE INTERCEPT POINT:..... AT -70dBm RF INPUT
VIDEO OUT =350mV (NOM) @ +25°c
- PULSE RANGE:..... 200ns TO CW
- PULSE RISE TIME (10% TO 90%):..... 100ns MAX
- PULSE OVERSHOOT:..... 1dB MAX WITH 50Ω LOAD
- PULSE FALL TIME (90% TO 10%):..... 200ns MAX
- ENABLE:..... TTL "1" ON, TTL "0" STANDBY
- ENABLE RECOVERY TIME:..... TBDns (ENABLE ON TO OUTPUT VALID)
- POWER SUPPLY:..... +12VDC @ 350mA MAX, +9VDC @ 400mA GOAL
- CONNECTORS:..... SMA FEMALE CONNECTORS
- FINISH:..... GOLD PLATED



ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -40°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:..... MIL-STD-202, METHOD 107D COND. A

PMI CONFIDENTIAL AND PROPRIETARY

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		 7309-A GROVE ROAD FREDERICK MARYLAND 21704 USA TEL: (301) 662-5019 FAX: (301) 662-1731 WEB: WWW.PMI-RF.COM EMAIL: SALES@PMI-RF.COM ISO 9001 CERTIFIED	
DRAWN M. HANKEN		DATE 11/1/2022		TITLE OUTLINE	
REISSUED				MODEL NO: SDLVA-15R4G15R7G-70DB-EN	
ISSUED				SIZE B	FSCM NO. 05XQ0
				DWG NO. 27044320	REV. A1
				SCALE 1:1	SHEET 1 OF 1