

DESCRIPTION:

Model Number SDLVA-1G20G-55-12-SFF-100OHM-ROHS IS A MINIATURE SDLVA (SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER) SUPPLIED IN OUR STANDARD PE2 HOUSING THAT CAN BE USED IN CONNECTORIZED OR STRIP LINE APPLICATIONS. IT OPERATES FROM 1.0 TO 20.0 GHz FREQUENCY RANGE, GREATER THAN 55dB DYNAMIC RANGE, AND ULTRA HIGH SPEED. ITS SIZE AND STUNNING PERFORMANCE MAKES IT AN ATTRACTIVE SOLUTION FOR HIGH-SPEED, WIDE-BAND AND HIGH-RELIABILITY CHANNELIZED RECEIVER APPLICATIONS.

SPECIFICATIONS:

- FREQUENCY RANGE:..... 1 GHz TO 20 GHz
- FREQUENCY FLATNESS:..... ±2.0 dB TYP
- LOG LINEARITY:..... ±1.5 dB (PIN = -50 TO 0 dBm) @ +25°C TYP
- LOG LINEARITY OVER TEMP:..... ±2.0 dB (PIN = -50 TO 0 dBm) @ -55°C to +85°C TYP
- LOGGING RANGE:..... -55 TO +5 dBm
- INPUT VSWR:..... 2.8:1 TYP
- LOG VIDEO OUTPUT VOLTAGE:..... 0.1 TO 2.5 V TYP
- LOG VIDEO OUTPUT SLOPE:..... 50 mV / dB TYP
- LOG VIDEO OUTPUT RISE TIME:..... 5 ns TYP (PIN = -20 dBm @ 10% to 90%)
- LOG VIDEO OUTPUT FALL TIME:..... 20 ns TYP (PIN = -20 dBm @ 90% to 10%)
- LOG VIDEO RECOVERY TIME:..... 28 ns TYP (PIN = -50 TO 0 dBm)
- LOG VIDEO PROPAGATION DELAY:..... 15 ns TYP
- TANGENTIAL SIGNAL SENSITIVITY:..... -58 dBm TSS TYP
- VIDEO OUTPUT LOAD:..... 100 OHM LOAD
- OPERATING VOLTAGE:..... +8 TO +15 VDC
- OPERATING CURRENT:..... 130 mA TYP
- FINISH:..... GOLD PLATED

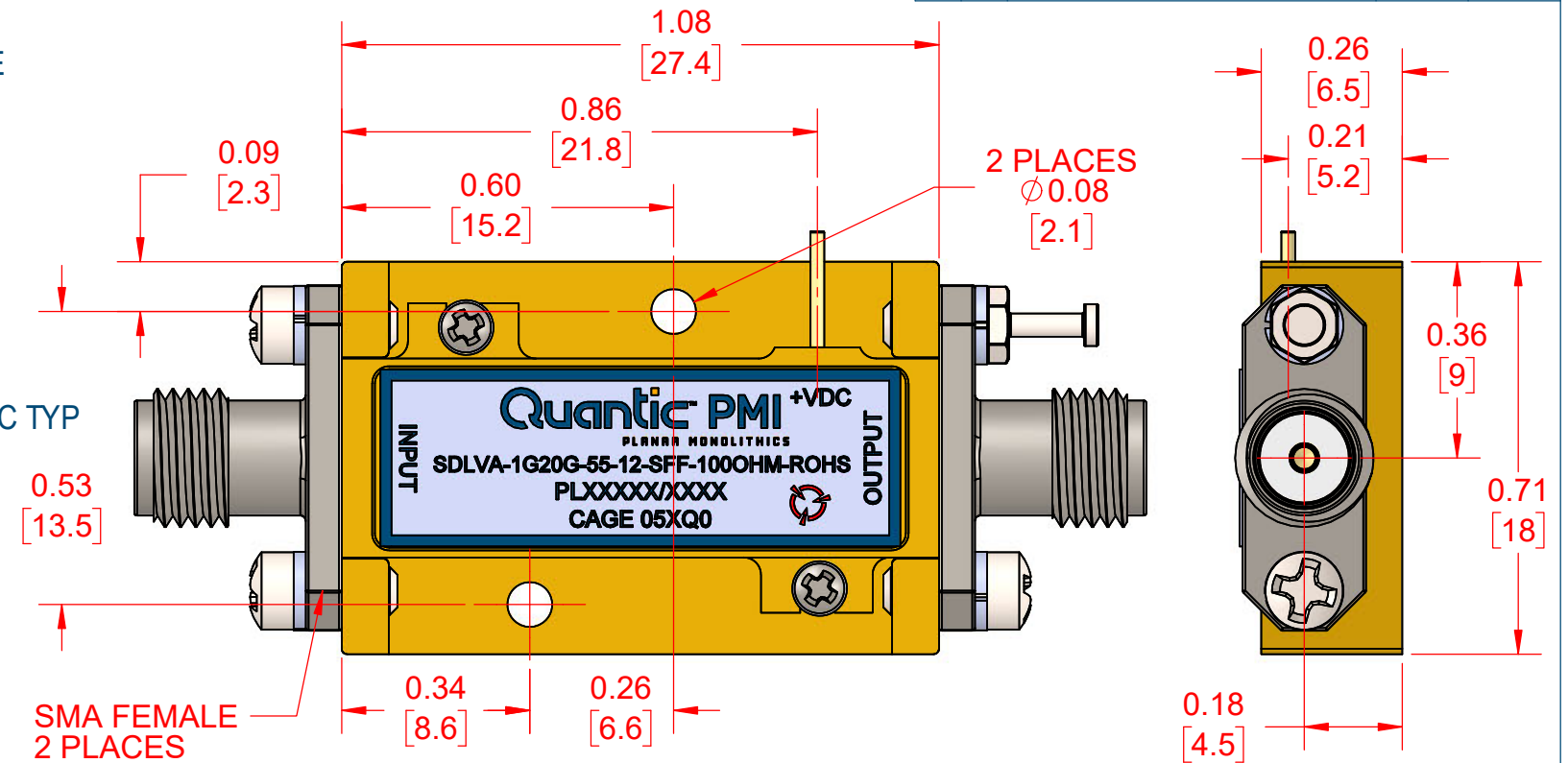
ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -55°C TO +85°C (OPERATING)
-65°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202F, METHOD 103B COND B.
- SHOCK:..... MIL-STD-202F, METHOD 213B COND B.
- ALTITUDE:..... MIL-STD-202F, METHOD 105B COND B.
- TEMPERATURE CYCLE:..... MIL-STD-202F, METHOD 107D COND A.

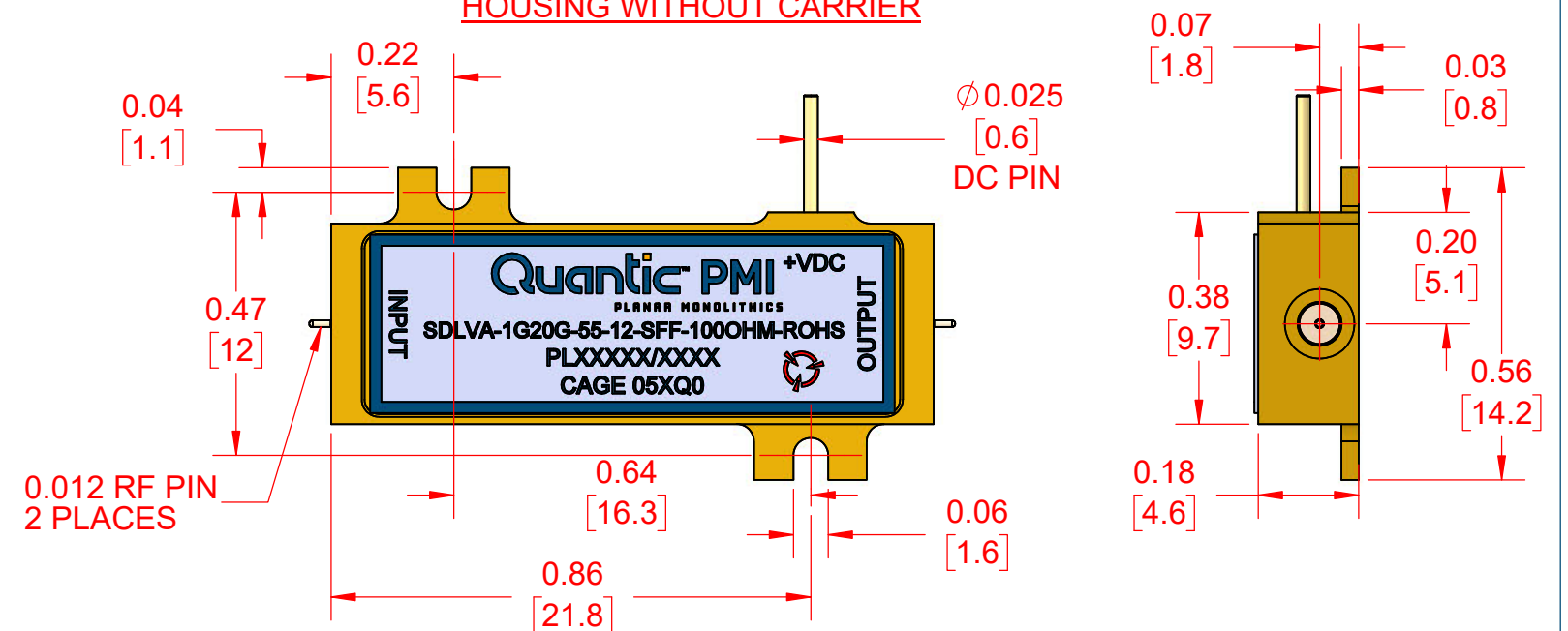
NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	4/16/24	
	A2	ECN # 25-0185	6/13/2025	

HOUSING WITH CARRIER



HOUSING WITHOUT CARRIER



PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS DRAWN S AZHAR REDRAWN ISSUED		DATE 4/16/24	Quantic PMI PLANAR MONOLITHICS 7309-A GROVE ROAD FREDERICK MARYLAND 21704 USA TEL: (301) 662-5019, FAX: (301) 662-1731 WEB: WWW.QUANTICPMI.COM, EMAIL: SALES@QUANTICPMI.COM ISO 9001 CERTIFIED	
TITLE OUTLINE SDLVA-1G20G-55-12-SFF-100OHM-ROHS			SIZE B	FSCM NO. 05XQ0
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± .XXX ± 0.01			DWG NO. 27048680	REV. A2
SCALE 3:1			SHEET 1 OF 1	