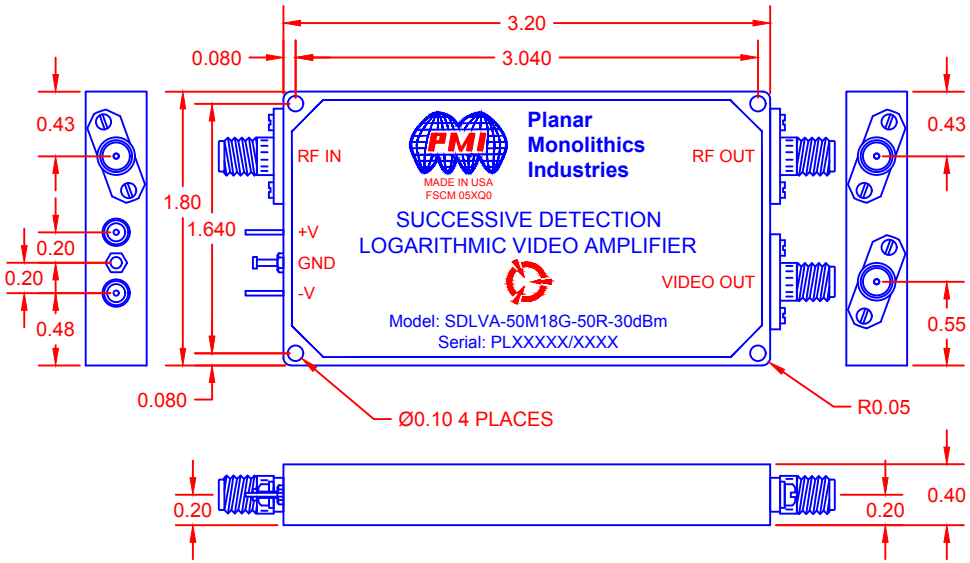
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	PRELIMINARY	11/11/15	PK

DESCRIPTION

PMI MODEL NUMBER SDLVA-50M18G-50R-30dBm A SDLVA (SUCCESSIVE DETECTION LOGARITHMIC VIDEO AMPLIFIER) DESIGNED TO OPERATE OVER THE 50 MHz TO 18 GHz FREQUENCY RANGE. THIS MODEL IS DESIGNED FOR ULTRA HIGH SPEED APPLICATIONS WHILE MAINTAINING FLATNESS AND ACCURACY.

MECHANICAL OUTLINE



SPECIFICATIONS

- FREQUENCY: ---------- 0.05 GHz to 18.0 GHz
- TSS: ---------- -71 dBm MIN
- VSWR: ---------- 2.5:1 MAX
- VIDEO OUTPUT RANGE: ---------- 0 VDC TO 2.2 VDC INTO A 50 Ω LOAD
- MAX VIDEO OUTPUT: ---------- 2.4 V
- INPUT POWER: ---------- +30 dBm CW MAX
- LOG RANGE: ---------- -70 dBm to 0 dBm
- LOG SLOPE: ---------- 25 mV/dB (±10%) @ 50 Ω LOAD
- LOG LINEARITY: ---------- ±1.75 dB MAX
- LOG SLOPE INTERCEPT POINT: --------- AT -70 dBm RF INPUT
VIDEO OUT = 350 mV (NOM) @ +25° C
- PULSE RANGE: ---------- 100 ns to CW
- PULSE RISE TIME (10% to 90%): ---------- 50 ns MAX
- PULSE OVERSHOOT: ---------- 1 dB MAX WITH 50 Ω LOAD
- PULSE FALL TIME (90% to 10%): --------- 200 ns MAX
- POWER SUPPLY: ---------- +12 to +15 VDC @ 400 mA MAX
-12 to -15 VDC @ 150 mA MAX
- CONNECTORS: ---------- SMA FEMALE CONNECTORS
- RF OUT: ---------- INTERNALLY NOT CONNECTED
- FINISH: ---------- GOLD PLATED

OPTIONS

- RFO: ---------- RF OUTPUT INTERNALLY CONNECTED

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

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES (mm)
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.
7311-F 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

APPROVALS	DATE
DRAWN MEB	11/11/15
CHECKED	
ISSUED	

TITLE: PRODUCT FEATURE SDLVA-50M18G-50R-30dBm

SIZE	FSCM NO.	DWG NO.	REV.
A	05XQ0	PRELIMINARY	-
SCALE N:S		SHEET 1 OF 1	