

**DESCRIPTION:**

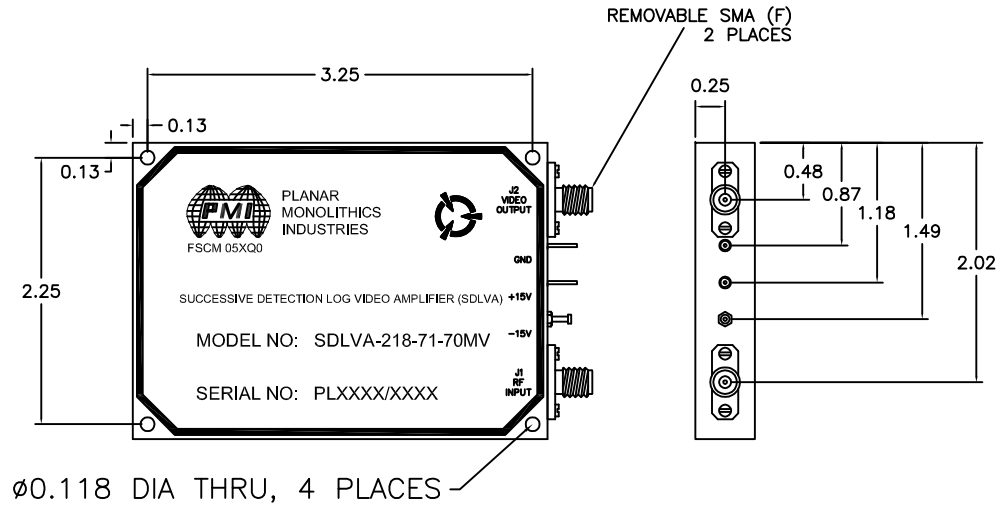
PMI Model No. SDLVA-218-71-70MV is a CW IMMUNE SDLVA (Successive Detection Log Video Amplifier). THIS UNIT OPERATES FROM 2.0 TO 18.0 GHz. IT HAS THE ABILITY TO INTERFACE WITH A LONG CABLE (250 FT), WHILE MAINTAINING HIGH SPEED, FLATNESS AND ACCURACY.

**SPECIFICATIONS:**

- FREQUENCY: . . . . . 2.0 GHz TO 18.0 GHz
- FREQUENCY FLATNESS: . . . . . ±2.0dB Typ
- SIGNAL CAPABILITY: . . . . . PULSE (100nS – 300µS), PULSE ON CW
- PEAK NOISE VOLTAGE IN PRESENCE OF A CW SIGNAL: . . . . . 400mV RELATIVE TO GROUND MAX (CW LEVEL UP TO –40dBm)
- PULSE PEAK AMPLITUDE LOSS: . . . . . CW LEVEL: –50dBm: NO LOSS, –40dBm: 1.5dB MAX
- TSS FROM –20°C TO +85°C . . . . . –72dBm FOR 10MHz VIDEO BANDWIDTH
- LOG DYNAMIC RANGE: . . . . . –66dBm TO 5dBm
- LOG SLOPE: . . . . . 70mV/dB NOMINAL
- LOG LINEARITY: . . . . . ±1.5dB MAX
- VIDEO OUTPUT RANGE: . . . . . –66dBm: 150~400mV, 250mV (CENTER)
- DC OFFSET: . . . . . ±150mV TYP
- NOISE LEVEL: . . . . . 75mV, RMS MAX, WITHOUT RF
- LOG ACCURACY FROM 70mV/dB: . . . . . ±2dB MAX AT FREQUENCY 2.0 – 18.0 GHz, ±1dB MAX AT CENTER FREQUENCY
- MATCHING vs. FREQUENCY & TEMPERATURE . . . . . ±2dB MAX FOR A SET OF 6 PIECES @10GHz AND 25°C
- OUTPUT RISE TIME: . . . . . 35nS MAX
- SETTLING TIME: . . . . . 55nS MAX, 10% OUTPUT TO ±0.5dB OF FINAL VALUE
- RECOVERY TIME: . . . . . 350nS MAX, MEASURED FROM EDGE OF 10 MICROSECOND PULSE TO LEADING EDGE OF NEXT 10 MICROSECOND PULSE TO WITHIN 1dB VOLTAGE LEVEL
- INPUT VSWR: . . . . . 2.0:1 MAX
- MAX INPUT LEVEL: . . . . . +20dBm CW
- VIDEO OUTPUT DRIVE: . . . . . THROUGH 250 Feet, 75Ω CABLE (RG11)
- POWER SUPPLY: . . . . . +15VDC @ 400mA MAX –15VDC @ 150mA MAX
- OPERATING TEMPERATURE: . . . . . –20°C TO +85°C
- SIZE: . . . . . (L) 3.5in X (W) 2.5in X (H) 0.5in (L) 88.9mm X (W) 63.5mm X (H) 12.7mm
- FINISH: . . . . . FLAT GREY. MOUNTING SURFACE FREE OF PAINT
- COOLING: . . . . . CONDUCTION COOLING AT MOUNTING SURFACE

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.010  
X.XXX ±0.005

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	03/31/11	



**ENVIRONMENTAL RATINGS:**

- TEMPERATURE: . . . . . –20°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
  - VIBRATION: . . . . . MIL–STD–202F, METHOD 204D COND. B
  - ALTITUDE: . . . . . MIL–STD–202F, METHOD 105C COND. B
  - TEMPERATURE CYCLE: . . . . . MIL–STD–202F, METHOD 107 COND. A
- NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>sfk</i>		03/31/11	PRODUCT FEATURE SDLVA–218–71–70MV			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	05XQ0	27012334	A
			SCALE	N:S		SHEET 1 OF 1