

## DESCRIPTION

THE MODEL SDLVA-18G40G-65-CD-292FF-OPT93OHM IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES BETWEEN THE 18 TO 40 GHz FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 65 dB, A LOG SLOPE OF 25 mV / dB, AND A NOMINAL VIDEO BANDWIDTH OF 32 MHz. FURTHERMORE, IT HAS BEEN DESIGNED USING CUTTING EDGE GaAs TECHNOLOGY WHICH PROVIDES STUNNING PERFORMANCE AND RELIABILITY IN A COMPACT PACKAGE MAKING IT AN OPTIMUM SOLUTION FOR HIGH SPEED CHANNELIZED RECEIVER APPLICATIONS.

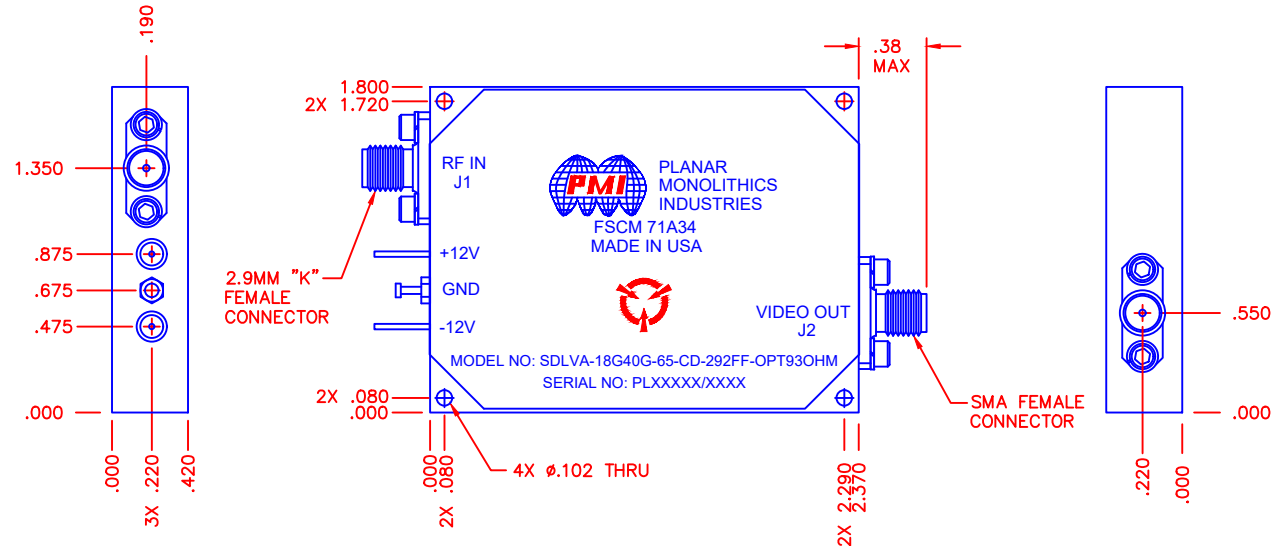
## SPECIFICATIONS

- FREQUENCY RANGE: \_\_\_\_\_ 18 GHz to 40 GHz
  - TSS \_\_\_\_\_ -65 dBm @ 25° C
  - INPUT POWER HANDLING \_\_\_\_\_ 10 dBm MAX
  - VIDEO LOG RANGE \_\_\_\_\_ -63 dBm to +2 dBm
  - VIDEO LOG LINEARITY \_\_\_\_\_ ± 2.0 dB @ 25° C  
± 3.0 OVER TEMP
  - VIDEO LOG SLOPE \_\_\_\_\_ 25 mV / dB nom
  - VIDEO LOG INTERCEPTS:  
VIDEO OUTPUT AT 2 dBm \_\_\_\_\_ 1940 mV MAX  
1476 mV MIN  
VIDEO OUTPUT AT -63 dBm \_\_\_\_\_ 280 mV MAX  
65 mV MIN
  - VIDEO FREQ FLATNESS \_\_\_\_\_ ± 2.5 dB MAX @ 25° C
  - PULSE WIDTH RANGE \_\_\_\_\_ 30 nS TO CW
  - VIDEO RISE TIME \_\_\_\_\_ 11 nS (8 nS typ)
  - RECOVERY TIME \_\_\_\_\_ 60 nS (40 nS typ)
  - DELAY TIME \_\_\_\_\_ 15 nS (5 nS typ)  
7 nS over temp typ
  - VIDEO OUTPUT LOAD IMPEDANCE \_\_\_\_\_ 93Ω
  - UNPUT VSWR (50 Ω) \_\_\_\_\_ 2.5:1
  - DC POWER SUPPLY:  
+V: \_\_\_\_\_ +12V @ 400 mA  
-V: \_\_\_\_\_ -12V @ 200 mA
- \*NOTE: DO NOT SUPPLY +V WITHOUT -V SUPPLIED AS WELL AS THIS MAY DESTROY THE UNIT
- SIZE: \_\_\_\_\_ (L) 2.37" X (W) 1.80" X (H) 0.42"
  - FINISH: \_\_\_\_\_ NICKEL PLATE PER SAE AMS 2404

## ENVIRONMENTAL RATINGS

- **TEMPERATURE:** \_\_\_\_\_ -54°C TO +85°C (OPERATING)  
-62°C TO +86°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 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  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010  
WEIGHT: 4 oz. MAX

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	8/13/19	

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
JOHNM		7-20-15	PRODUCT FEATURE		
CW		7/10/19	SDLVA-18G40G-65-CD-292FF-OPT93OHM		
			SIZE	FSCM NO.	DWG NO.
			A	71A34	27037141
			SCALE	N:S	SHEET
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