

DESCRIPTION

THE MODEL SDLVA-0R81R6-75-CD-3 IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES BETWEEN THE 850 TO 1550 MHz FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 75 dB, A LOG SLOPE OF 40 mV / dB, AND A NOMINAL VIDEO BANDWIDTH OF 20 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: 850MHz TO 1550MHz
- DYNAMIC RANGE: > 75dB
- LOG LINEARITY: ± 0.8 dB Typ, ± 1.2 dB Max @ (-60 dBm TO 0 dBm)
 ± 1.2 dB Typ, ± 1.5 dB Max @ (-65 dBm TO +5 dBm)
- MINIMUM LOGGING RANGE: -70 dBm
- MAXIMUM LOGGING RANGE: +5 dBm
- VSWR INPUT: 1.5:1 Typ, 1.8:1 Max
- TANGENTIAL SENSITIVITY: -70 dBm TYPICAL
- LIMITED IF OUTPUT: +5 dBm TYPICAL
- MAXIMUM RF INPUT POWER: +10 dBm CW
- LOG VIDEO OUTPUT:
 - OUTPUT COUPLING: DC
 - RISE TIME: 15 ns Typ, 25 ns Max
 - FALL TIME: 15 ns Typ, 30 ns Max
 - SETTLING TIME: 40 ns Max
 - DC OFFSET: 0.1 V NOMINAL (ADJUSTABLE)
 - LOG SLOPE: 40 mV/dB NOMINAL
 - LOG SLOPE VARIATION WITH FREQUENCY: ± 0.5 mV/dB TYPICAL (OVER 80 MHz RF BANDWIDTH)
 - LOG SLOPE VARIATION WITH TEMPERATURE: ± 1 mV/dB TYPICAL
 - PROPAGATION DELAY: 10 ns MAXIMUM, 7 ns TYPICAL
- VIDEO LOAD: $50\Omega \pm 10\%$
- DC POWER SUPPLY:
 - +V: +12V TO +15V @ 200 mA
 - V: -12V TO -15V @ 190 mA

- SIZE: (L) 3.75" X (W) 1.50" X (H) 0.50"
- FINISH: GOLD PLATED

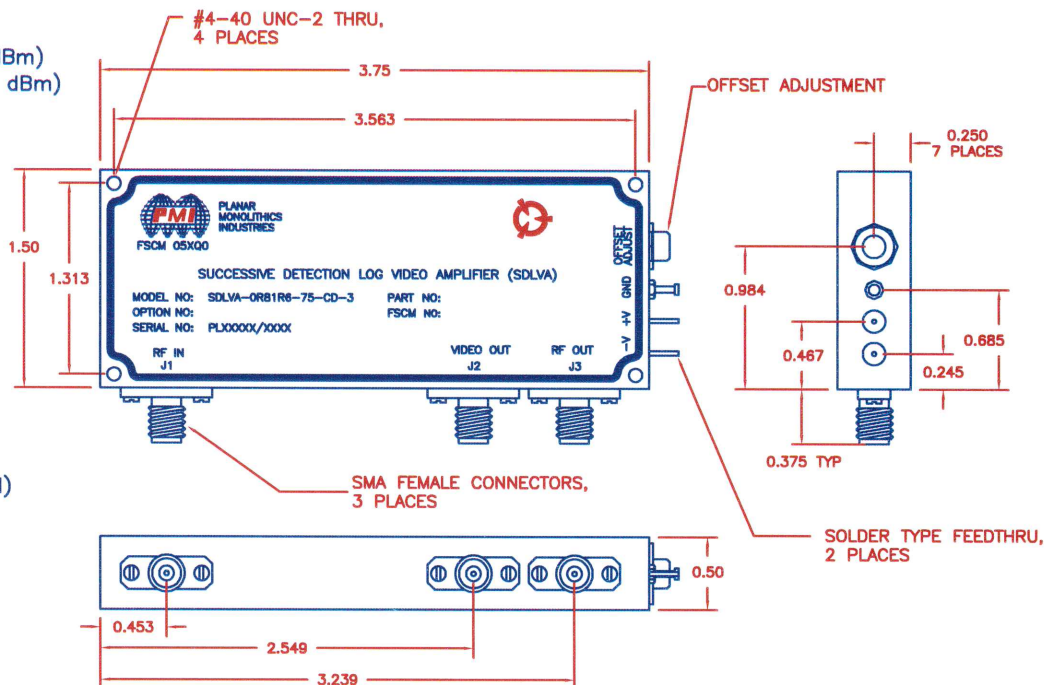
ENVIRONMENTAL RATINGS

- TEMPERATURE: -55°C TO +85°C (OPERATING)
-65°C TO +100°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: 2.75 oz.



PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED

APPROVALS		DATE		TITLE	
DRAWN		T. LUDDEN		10/25/13	
CHECKED					
ISSUED					
SIZE		FSCM NO.		DWG NO.	
A		05XQ0		PRELIMINARY	
SCALE		N:S		SHEET	
				1 OF 1	

PRODUCT FEATURE
SDLVA-0R81R6-75-CD-3

850 TO 1550 MHz, SUCCESSIVE DETECTOR LOG VIDEO AMPLIFIER

REV.
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