

DESCRIPTION

THE MODEL SLVAC-06135M-A08-LA MINIATURE SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) OPERATES OVER THE 0.6 TO 1.35 GHz FREQUENCY RANGE. THESE UNITS HAVE A DYNAMIC RANGE OF 65 TO 70 dB, A TSS OF -65 dBm (-70dBm TYPICAL) FURTHERMORE, THESE UNITS ARE 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. THESE UNITS OFFER FAST RISE TIME ≤ 25 ns MAXIMUM, RAPID FALL TIME ≤ 30 ns MAXIMUM.

SPECIFICATIONS

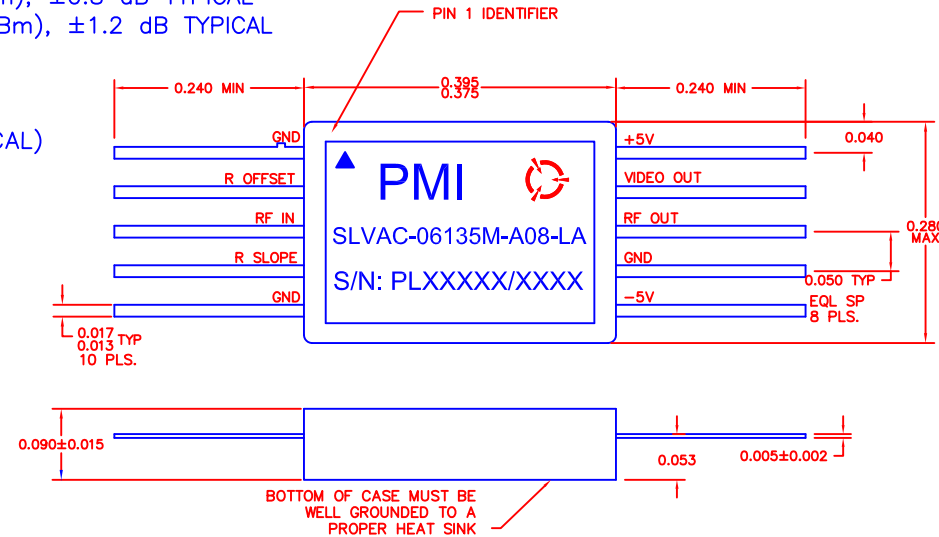
- FREQUENCY RANGE: 0.6 TO 1.35 GHz
- DYNAMIC RANGE: > 65 dB
- LOG LINEARITY: ± 1.2 dB MAX. (-60 dBm TO 0 dBm), ± 0.8 dB TYPICAL
 ± 1.5 dB MAX. (-65 dBm TO +5 dBm), ± 1.2 dB TYPICAL
- MINIMUM LOGGING RANGE: -60 dBm (-65 dBm TYPICAL)
- MAXIMUM LOGGING RANGE: +5 dBm (+8 dBm TYPICAL)
- VSWR INPUT: 1.8:1 MAXIMUM (1.5:1 TYPICAL)
- TANGENTIAL SENSITIVITY: -65 dBm MINIMUM (-70 dBm TYPICAL)
- LIMITED IF OUTPUT: -18 dBm MINIMUM
(INPUT POWER BETWEEN -55 dBm AND +5 dBm)
- MAXIMUM RF INPUT POWER: +10 dBm
- LOG VIDEO OUTPUT:
 - OUTPUT COUPLING: DC
 - MAXIMUM OUTPUT VOLTAGE: 2.7 VOLTS
 - RISE TIME: 25 ns MAXIMUM
 - FALL TIME: 30 ns MAXIMUM
 - SETTling TIME: 40 ns MAXIMUM
 - DC OFFSET: EXTERNALLY ADJUSTABLE
 - SLOPE: ADJUSTABLE TO 30mV/dB
 - LOG SLOPE VARIATION WITH FREQUENCY: ± 0.7 mV/dB MAXIMUM
(OVER 80 MHz RF BANDWIDTH FROM 750MHz - 1350MHz)
 ± 1.0 mV/dB MAXIMUM
(OVER 80 MHz RF BANDWIDTH FROM 650MHz - 750MHz)
 - LOG SLOPE VARIATION WITH TEMPERATURE: ± 1 mV MAXIMUM
 - PROPAGATION DELAY: 10 ns MAXIMUM, 7 ns TYPICAL
 - VIDEO LOAD: 100 Ω (MINIMUM)
- POWER SUPPLY (REGULATED TO 0.1%):
 - +V: +5VDC @ 30mA MAXIMUM (NO VIDEO LOAD)
 - -V: -5VDC @ 170mA MAXIMUM
- SIZE: 0.395" x 0.280" x 0.090"

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	09/13/13	
	A2	ECN # 17-0052	09/22/17	



PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED



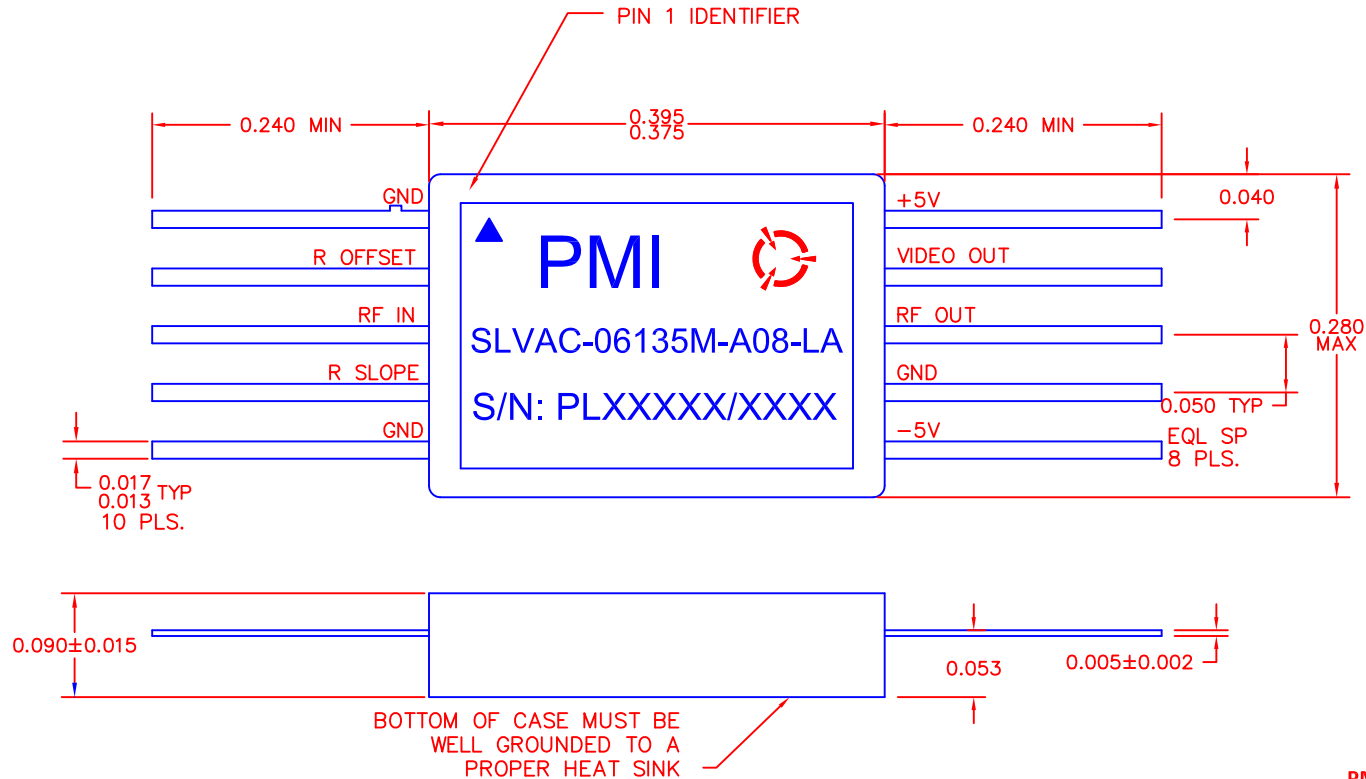
APPROVALS		DATE	TITLE			
DRAWN <i>yk</i>		09/13/13	PRODUCT FEATURE			
CHECKED			SLVAC-06135M-A08-LA			
ISSUED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27010182	REV. A2
			SCALE N:S			SHEET 1 OF 3

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

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MECHANICAL OUTLINE

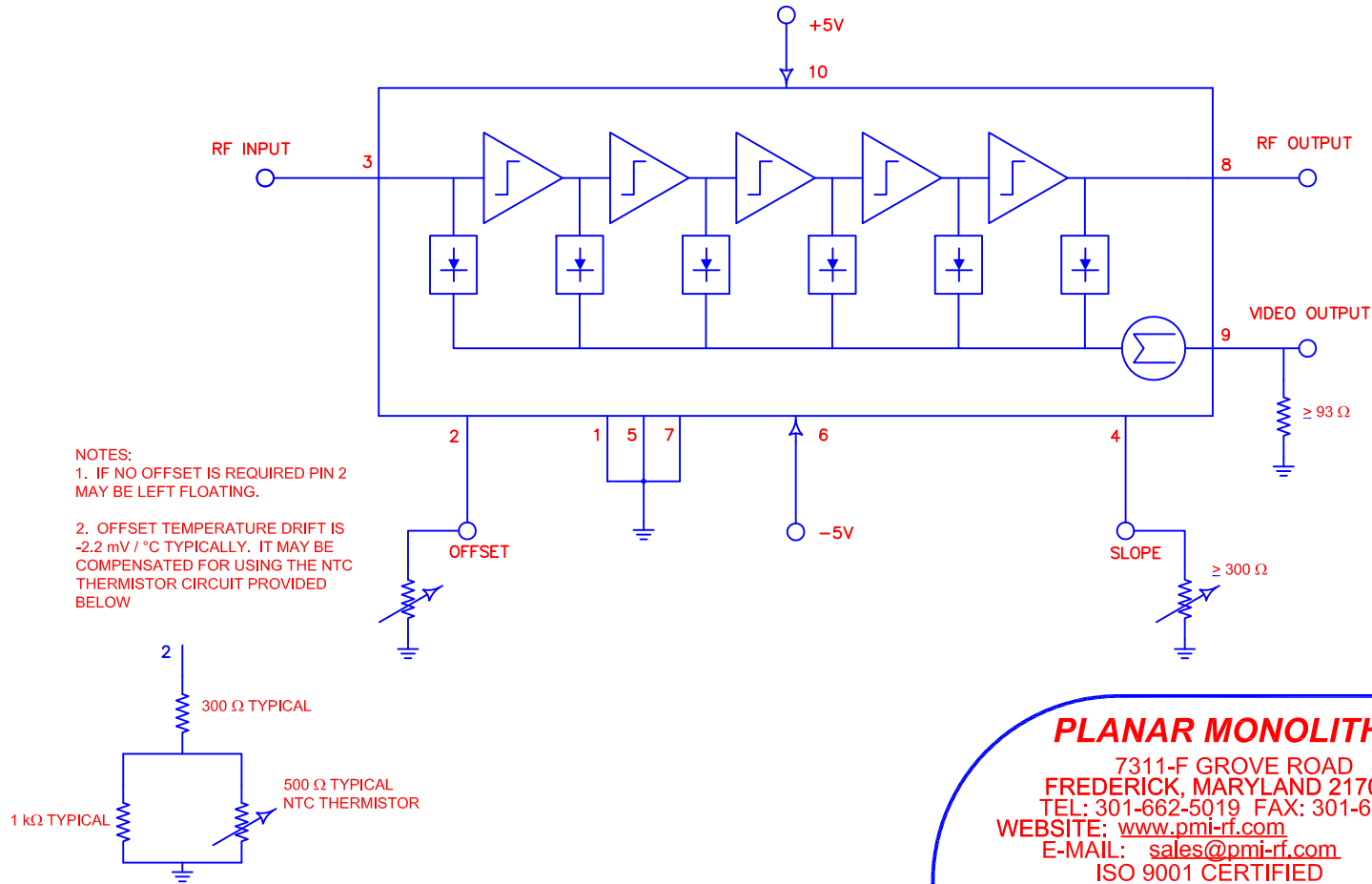
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SCALE N:S			SHEET		2 OF 3	

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FUNCTIONAL BLOCK DIAGRAM

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