

## DESCRIPTION:

THE MODEL SDLVA-61F-80 OPTION: 582987-002, TBRK IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES OVER THE 61.25 MHz  $\pm$ 250 KHz RANGE

## SPECIFICATIONS:

- INPUT CHARACTERISTICS:
  - TEST FREQUENCY:.....61.25 MHz  $\pm$ 250 KHz
  - SIGNAL RANGE:.....-80 dBm TO 0 dBm
  - VSWR:.....1.2:1 MAXIMUM
- TRANSFER CHARACTERISTICS:
  - BANDWIDTH:.....6.0 TO 8.6 MHz
  - TRANSFER FUNCTION:.....THE OUTPUT SHALL CONFORM TO THE FOLLOWING TRANSFER FUNCTION:  
 $E = 22.5 \text{ Pin} + 200$   
 WHERE:  
 $\text{Pin} = \text{INPUT POWER IN dB ABOVE } -80 \text{ dBm}$   
 $E = \text{OUTPUT VOLTAGE IN MILLIVOLTS}$
- ACCURACY:.....THE OUTPUT VOLTAGE SHALL BE  $E + 22.5 \text{ mV}$  FOR ANY INPUT IN THE SIGNAL RANGE
- OUTPUT CHARACTERISTICS:
  - LOAD IMPEDANCE:.....50 OHMS
  - COUPLING:.....OUTPUT SHALL BE DC COUPLED TO LOAD
  - PULSE CHARACTERISTICS:
    - RISE TIME:.....117 nsec MAXIMUM
    - FALL TIME:.....491 nsec MAXIMUM TO FALL FROM 2V TO 0.2V FOR AN INPUT PULSE WITH AN AMPLITUDE OF 0 dBm
  - STABILITY:.....THE UNIT SHALL BE UNCONDITIONALLY STABLE (i.e. NON-OSCILLATORY) UNDER ALL OPERATING CONDITIONS AS WELL AS FOR A SOURCE AND/OR LOAD VSWR OF 1.5:1 MAXIMUM  
 THE UNIT SHALL BE UNCONDITIONALLY STABLE (i.e. NON-OSCILLATORY) UNDER ALL OPERATING CONDITIONS
- POWER REQUIREMENTS:
  - SUPPLY:.....+15 VDC  $\pm$  1 VDC @ 100 mA PER CHANNEL  
 -15 VDC  $\pm$  1 VDC @ 100 mA PER CHANNEL
  - RIPPLE:.....100 mV PEAK-TO-PEAK MAXIMUM
- CONNECTORS:
  - INPUT SIGNAL:.....SMA FEMALE
  - OUTPUT SIGNAL:.....SMA FEMALE
  - POWER CONNECTOR:.....CANNON TYPE DEMM-9P OR EQUIVALENT WITH SCREWLOCK

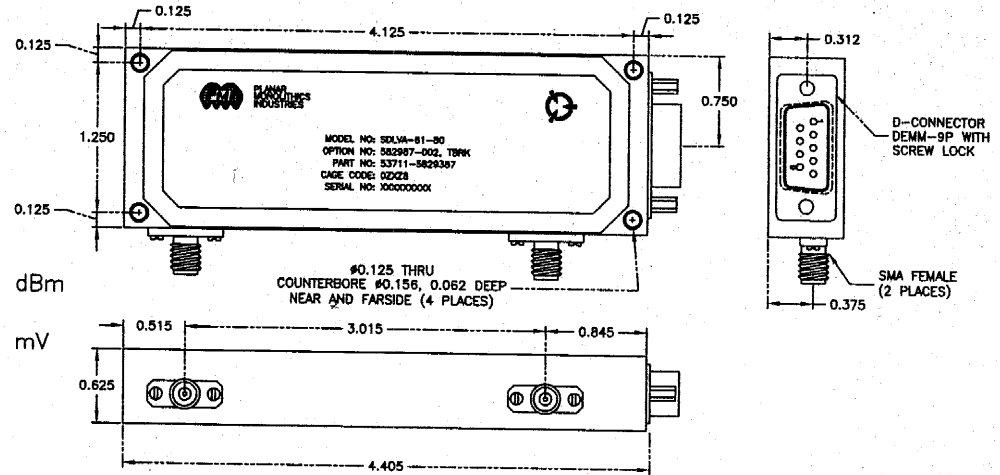
## ENVIROMENTAL RATINGS:

- TEMPERATURE:.....-35°C TO +75°C (OPERATING)
- TEST FREQUENCY:.....-62°C TO +75°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

ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 X.XX  $\pm$ 0.010  
 X.XXX  $\pm$ 0.005

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB # P302006E	8/26/03	

## MECHANICAL OUTLINE:



PIN	FUNCTION
1	+15 VDC SUPPLY
2	$\pm$ 15 VDC RETURN
3	-15 VDC SUPPLY
4	NO CONNECTIONS
5	NO CONNECTIONS
6	NO CONNECTIONS
7	NO CONNECTIONS
8	NO CONNECTIONS
9	NO CONNECTIONS

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PART NO.		PLANAR MONOLITHICS INDUSTRIES FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE PRODUCT FEATURE SDLVA-61F-80 OPTION: 582987-002, TBRK	
DRAWN <i>KAB</i>	8/26/03	SIZE	FSCM NO. A OZXZ8
CHECKED <i>PA</i>	8/27/03	DWG NO.	100-6686
ISSUED		REV.	-
SCALE N:S		SHEET 1 of 3	