

## DESCRIPTION

PMI MODEL ERLVA-1840-60-50MV IS A ERLVA THAT OPERATES FROM 18.0 TO 40.0GHZ. THIS ERLVA FEATURES DIFFERENTIAL AS WELL AS SINGLE ENDED VIDEO OUTPUTS, AND A VIDEO TEST OUTPUT. SEE FULL SPECIFICATIONS BELOW.

## SPECIFICATIONS

- FREQUENCY RANGE \_\_\_\_\_ 18.0 TO 40.0GHz
- INPUT DYNAMIC RANGE \_\_\_\_\_ -60 TO 0dBm MIN
- FREQUENCY FLATNESS \_\_\_\_\_  $\pm 2$ dB TYP,  $\pm 2.5$ dB MAX
- VSWR \_\_\_\_\_ 2.0:1 MAX
- LOG LINEARITY \_\_\_\_\_  $\pm 2$ dB MAX AT ANY FREQUENCY
- TSS \_\_\_\_\_ -68dBm MINIMUM
- LOG SLOPE \_\_\_\_\_ 50mV NOMINAL
- VIDEO RISE TIME \_\_\_\_\_ 20ns TYPICAL, 35ns MAX 10% TO 90% VIDEO OUTPUT
- VIDEO SETTLING TIME \_\_\_\_\_ 45ns MAX TO WITHIN 1dB OF FINAL VALUE
- VIDEO RECOVERY TIME \_\_\_\_\_ 300ns TYP, 500ns MAX TO WITHIN 1dB OF SMALL SIGNAL GAIN
- SINGLE ENDED VIDEO OUTPUT (J2) \_\_\_\_\_ 0 TO +4V MAX INTO 50 $\Omega$  LOAD SUITABLE TO DRIVE 100FT.CABLE , 0-8V OPEN CIRCUIT
- DIFFERENTIAL VIDEO OUTPUT (E1, E2) \_\_\_\_\_ 0 TO  $\pm 4$ V INTO 100 $\Omega$  LOAD SUITABLE TO DRIVE 100FT. CABLE, 0 TO  $\pm 8$ V OPEN CIRCUIT  
MAY BE USED AS ALTERNATE TO J2 SINGLE ENDED OUTPUT. ONLY ONE TYPE CONNECTED TO LOAD
- VIDEO TEST OUTPUT (E3) \_\_\_\_\_ 0 TO 3.3V INTO 1K LOAD
- VIDEO OFFSET \_\_\_\_\_ 200mV  $\pm 200$ mV
- DC POWER \_\_\_\_\_ +11.4 TO +14.0VDC @ 450mA MAX WITH NO VIDEO LOAD  
-11.4 TO -14.0VDC @ 250mA MAX
- WEIGHT \_\_\_\_\_ 6 OUNCES MAX
- FINISH \_\_\_\_\_ NICKEL PLATE
- MTBF \_\_\_\_\_ DESIGNED FOR 350,000 HOURS @ +50°C  
NAVAL UNSHELTERED ENVIRONMENT (NU)
- LEAKAGE LEVEL \_\_\_\_\_ -60 dBm AT 0 dBm ALL OUTPUTS  
TERMINATED IN 50 OHMS.

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	3-11-15	JM

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### PLANAR MONOLITHICS INDUSTRIES, INC.

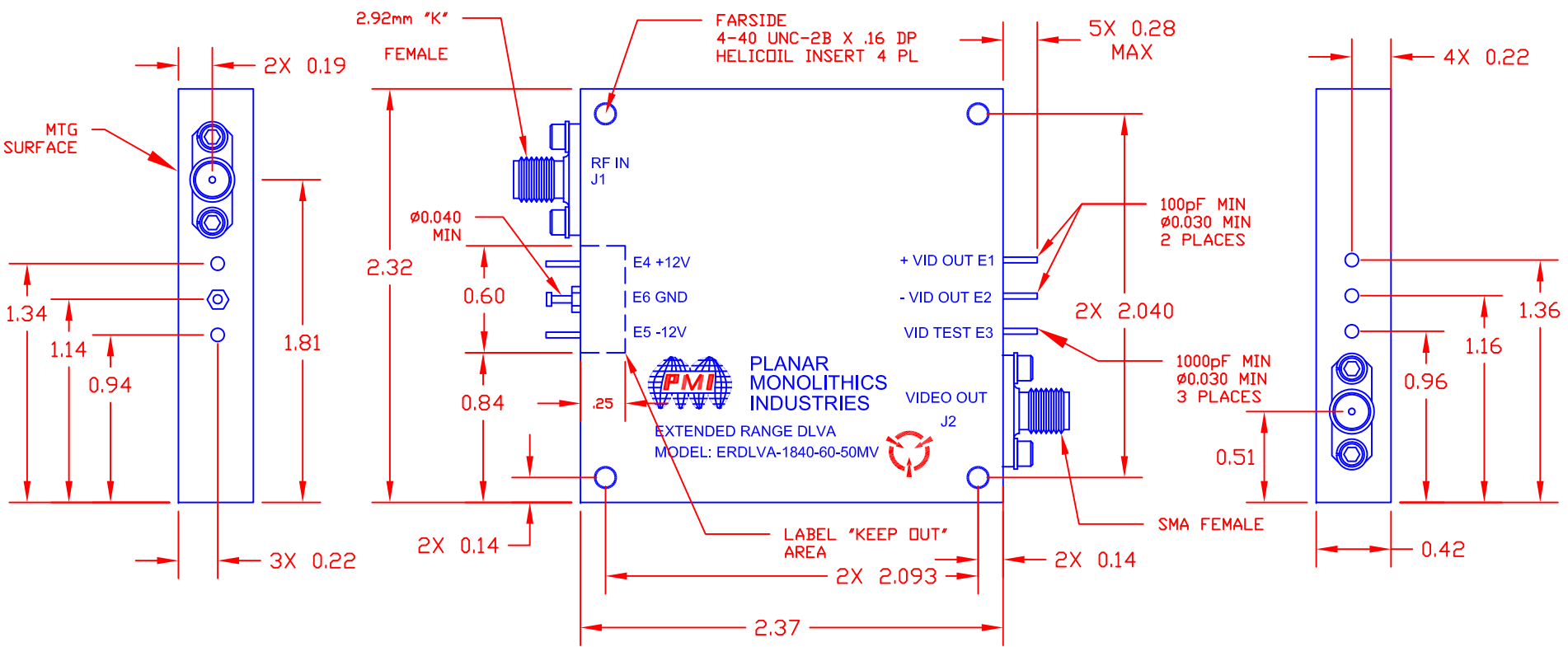
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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN	JM	3-11-15	PRODUCT FEATURE ERLVA-1840-60-50MV			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	71A34	PRELIMINARY	-
			SCALE	N:S	SHEET	1 OF 2

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	8-11-15	JM

## MECHANICAL OUTLINE



- NOTES:**
- CONNECTORS E3, E4, & E5 1000pF MIN, 0.03 MIN DIA.
  - GROUND TURRET 0.04 MIN SHANK DIA.

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**ENVIRONMENTAL RATINGS**

- TEMPERATURE:** -20°C TO +85°C (OPERATING)  
-54°C TO +85°C (STORAGE)
- HUMIDITY:** TO 100% RELATIVE HUMIDITY +30°C TO +55°C WITH CONDENSATION
- SHOCK:** 160G, HALF SINE WAVE PULSE, WITH 0.7 TO 2ms DURATION IN 3 AXIS
- VIBRATION:** MIL-STD-167-1A
- ALTITUDE:** 30,000FT OPERATING, 40,000FT NON-OPERATING, MIL-STD-810D METHOD 500.2 PROCEDURE 1 & 2

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.01  
X.XXX ±0.005

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APPROVALS		DATE	TITLE		
DRAWN JM		8-11-15	PRODUCT FEATURE ERDLVA-1840-60-50MV		
CHECKED			SIZE A	FSCM NO. 71A34	DWG NO. PRELIMINARY
ISSUED			SCALE N:S		SHEET 2 OF 2