

**DESCRIPTION**

PMI MODEL THD-4G8G-20-20 IS A THRESHOLD DETECTOR THAT OPERATES FROM 4-8 GHz. IT HAS AN ADJUSTABLE THRESHOLD FROM -20 TO 0 dBm.

**SPECIFICATIONS**

- FREQUENCY RANGE: \_\_\_\_\_ 4-8 GHz
- SENSITIVITY: \_\_\_\_\_ -20 dBm
- DYNAMIC RANGE: \_\_\_\_\_ -20 TO 0 dBm
- COUPLING: \_\_\_\_\_ DC COUPLED
- SYNTHETIC VIDEO O/P: \_\_\_\_\_ TTL (POSITIVE LOGIC)
- PULSE WIDTH MIN: \_\_\_\_\_ 200 ns
- RISE TIME MAX: \_\_\_\_\_ 20 ns
- INPUT IMPEDANCE: \_\_\_\_\_ 50 OHMS NOMINAL
- POWER HANDLING MAX: \_\_\_\_\_ 50 mW (17 dBm)
- THRESHOLD SETTING: \_\_\_\_\_ -20 TO 0 dBm VIA RESISTOR TO GROUND  
RESISTOR OPEN = 0dBm
- THRESHOLD RESOLUTION: \_\_\_\_\_ +/- 1.0 dB
- RAW VIDEO OUTPUT: \_\_\_\_\_ 50 mV TYPICAL @ -20 dBm
- RAW VIDEO OUTPUT IMPEDANCE: \_\_\_\_\_ 1K OHM
- PROPAGATION DELAY: \_\_\_\_\_ 15 ns MAX
- DC SUPPLY: \_\_\_\_\_ +/- 15 VDC
- SIZE: \_\_\_\_\_ 1.37" X 1.18" X (H) 0.35"
- FINISH \_\_\_\_\_ NICKEL PLATED

**ENVIRONMENTAL RATINGS**

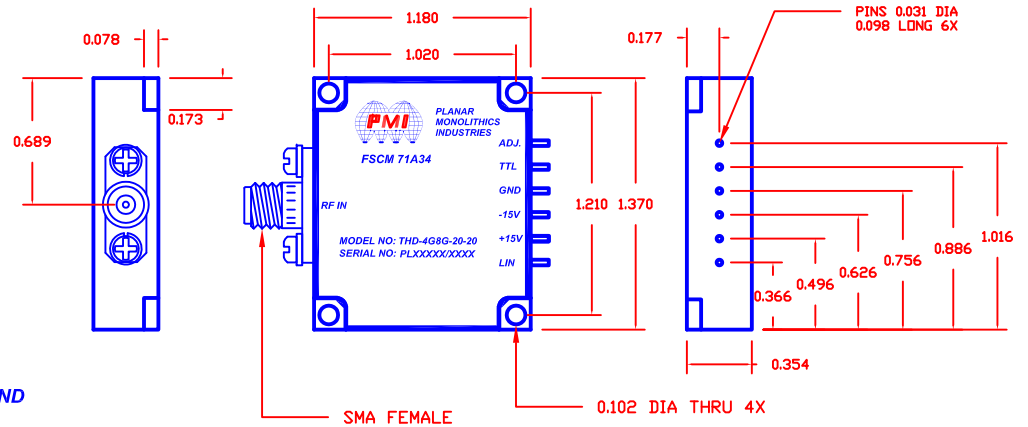
- TEMPERATURE: \_\_\_\_\_ -40°C TO + 85°C (OPERATING)
- DAMP HEAT: \_\_\_\_\_ 40°C @ 95% RH
- ALTITUDE: \_\_\_\_\_ 4000 meters (-10°C)
- VIBRATION (SINUSOIDAL)
  - a) RESONANCE SEARCH: \_\_\_\_\_ 5-8 Hz, +/- 6mm CONSTANT DISPLACEMENT  
8 TO 500 Hz 1.5g
  - b) ENDURANCE: \_\_\_\_\_ 1 HOUR / AXIS
- EMI / EMC: \_\_\_\_\_ MIL-STD-461-D

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

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	PRELIMINARY	7-6-20	

**MECHANICAL OUTLINE**



PMI CONFIDENTIAL AND PROPRIETARY

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APPROVALS		DATE	TITLE		
DRAWN <i>JM</i>		7-6-20	PRODUCT FEATURE		
CHECKED			MODEL NO: THD-4G8G-20-20		
ISSUED			SIZE A	FSCM NO. 71A34	DWG NO. PRELIMINARY
			SCALE N:S		SHEET 1 OF 1
					REV. 1