

## DESCRIPTION

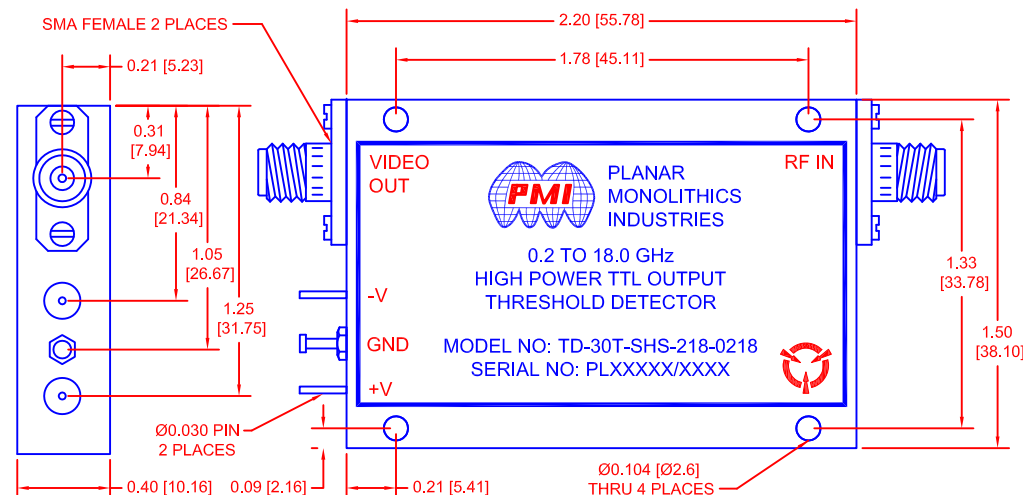
PMI MODEL: TD-30T-SHS-218-0218 IS A HIGH SPEED, TTL LOGIC OUTPUT THRESHOLD DETECTOR DESIGNED TO OPERATE FROM 0.2 GHz TO 18.0 GHz WITH AN INPUT VSWR OF 2.0:1 @ -20 dBm AND A DYNAMIC RANGE OF -20 dBm TO +10 dBm.

| REVISIONS |      |                  |          |          |
|-----------|------|------------------|----------|----------|
| ZONE      | REV. | DESCRIPTION      | DATE     | APPROVED |
|           | A1   | ORIGINAL RELEASE | 04/26/17 |          |
|           | A2   | ECN # 17-0197    | 08/10/17 |          |
|           |      |                  |          |          |

## SPECIFICATIONS

- FREQUENCY RANGE: ----- 1.0 TO 18.0 GHz
- VSWR: ----- 3.0:1 MAX @ -20 dBm
- MINIMUM SIGNAL LEVEL FOR LOGIC 1: -- -15 dBm  $\pm$  2 dB
- THRESHOLD VARIATION OVER FREQUENCY (ANY 1 GHz WINDOW): ----  $\pm$ 0.5 dB
- MINIMUM SIGNAL LEVEL FOR LOGIC 0: -- -25 dBm
- PROPAGATION DELAY (FROM 50% OF AN INPUT OF -20 dBm): -- 15 ns MAX
- PROPAGATION DELAY (FROM 50% OF AN INPUT OF +10 dBm): -- 15 ns MAX
- DC POWER SUPPLY: ----- +15 VDC @ 100 mA MAX  
-15 VDC @ 100 mA MAX
- CONNECTORS: ----- SMA FEMALE 2 PLACES
- SIZE (EXCLUDING CONNECTORS): ----- 2.20" x 1.50" x 0.40"
- WEIGHT: ----- 3 oz MAX
- FINISH: ----- GOLD PLATED

## MECHANICAL OUTLINE



## ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -55 °C TO +85 °C (OPERATING)  
-65 °C TO +100 °C (NON-OPERATING)
- HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B
- SHOCK: ----- MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: ----- MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLING: ----- MIL-STD-202, 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 INCH [mm]  
TOLERANCES:  
X.XX  $\pm$  0.020 [0.508]  
X.XXX  $\pm$  0.010 [0.254]

**PMI CONFIDENTIAL AND PROPRIETARY**

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ISO 9001 CERTIFIED



| APPROVALS               |  | DATE     |  | TITLE                                                    |                |
|-------------------------|--|----------|--|----------------------------------------------------------|----------------|
| DRAWN <i>EMF</i>        |  | 10/07/15 |  | PRODUCT FEATURE<br>TD-30T-SHS-218-0218                   |                |
| REDRAWN <i>M. Berry</i> |  | 08/10/17 |  | 0.2 to 18.0 GHz High Power TTL Output Threshold Detector |                |
| ISSUED                  |  |          |  | SIZE A                                                   | FSCM NO. 05XQ0 |
|                         |  |          |  | DWG NO. 27032481                                         | REV. A2        |
|                         |  |          |  | SCALE N:S                                                | SHEET 1 OF 1   |