

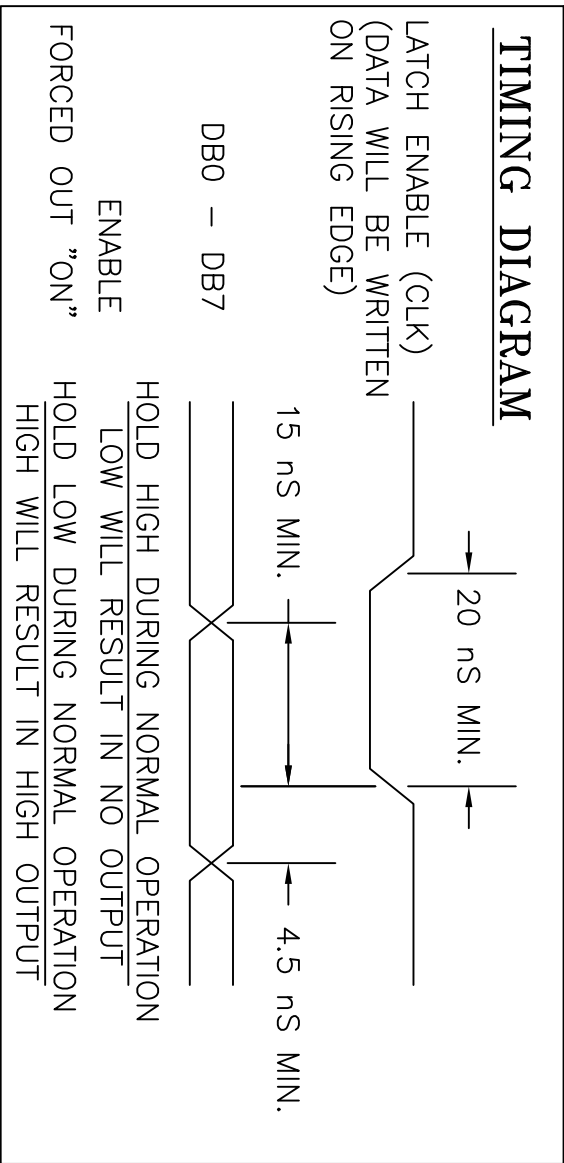
DESCRIPTION

PMI MODEL NO.: TD-30T-SHS-218-30DBAMP-DAC-DS IS AN ULTRA-HIGH SPEED, HIGH SENSITIVITY THRESHOLD DETECTOR DESIGNED FOR BROAD BAND APPLICATIONS IN THE 2 to 18 GHz FREQUENCY RANGE. THIS IS A MINIATURE UNIT WITH TTL OUTPUT LOGIC. A PARALLEL 8 BIT DIGITAL TO ANALOG CONVERTER IS INCLUDED TO SET THE THRESHOLD LEVEL. ALSO INCLUDED IS A COMPARATOR MONITOR OUT (TTL), A FORCE OUT "ON", AND AN ENABLE PIN.

SPECIFICATIONS

- FREQUENCY RANGE:..... 2 TO 18 GHz
- MINIMUM SIGNAL LEVEL FOR THRESHOLD DETECTOR TO RESPOND.....-45 dBm
- PROPAGATION DELAY TO 50% MONITOR LOGIC OUTPUT ON LEADING EDGE FOR AN INPUT OF -45 dBm..... 15 nSEC (TYP), 30 nSEC (MAX)
- PROPAGATION DELAY FROM 50% RF INPUT TO 50% LOGIC OUTPUT WHEN INPUT -45 dBm..... 30 nSEC (TYP), 45 nSEC (MAX)
- DC POWER +12V (NO LOAD)..... 300 mA (TYP)
- DC POWER -12V (NO LOAD)..... 120 mA (TYP)
- SIZE..... 2.5"(L) X 2.0"(W) X 0.5"(H)
- FINISH..... 50 uin. GOLD PLATING MIN. OVER COPPER FLASH OVER NICKEL FLASH PER MIL-G 45204 TYPE 2

TIMING DIAGRAM

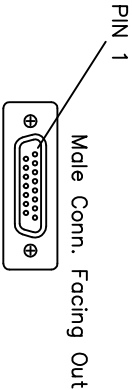
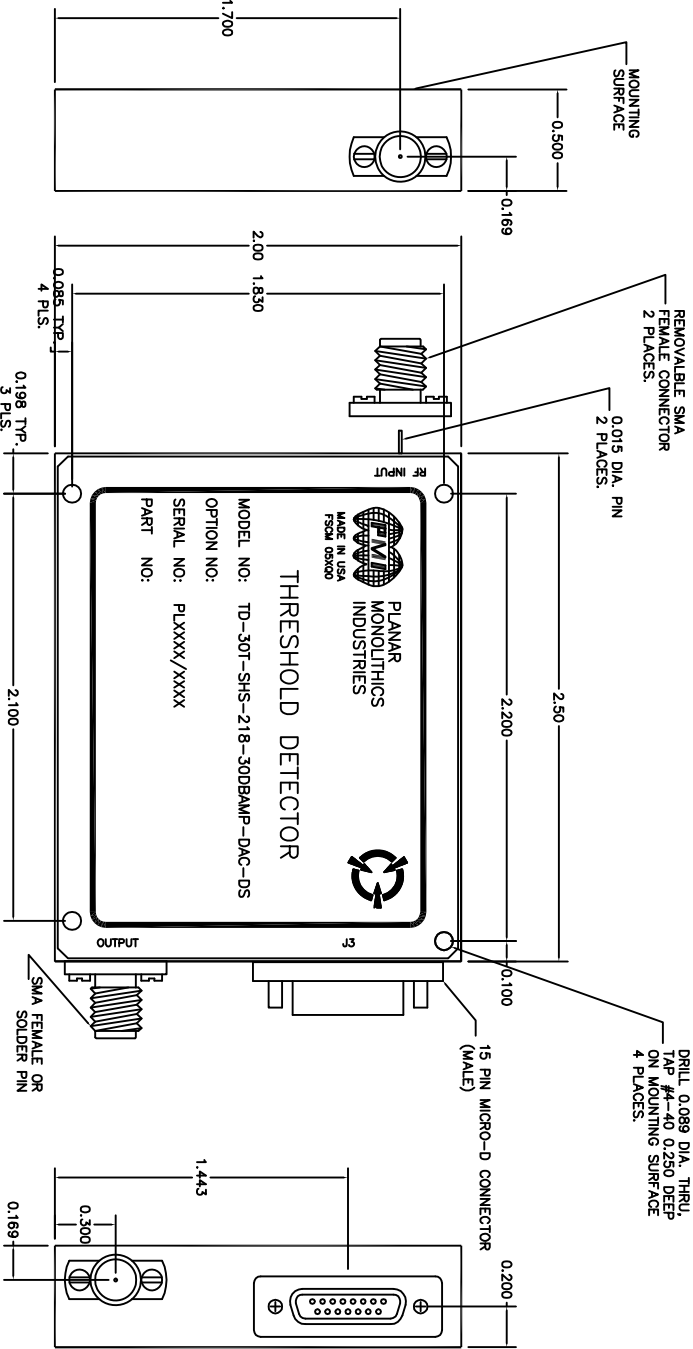


ENVIRONMENTAL RATINGS

- TEMPERATURE:.....-55°C TO +85°C (OPERATING)
-65°C TO +125°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
	A	ORIGINAL RELEASE	9/30/09
	B	CURRENT DRAW INCREASED	12/14/10



- PIN 1 - DB0 (LSB)
- PIN 2 - DB1
- PIN 3 - DB2
- PIN 4 - DB3
- PIN 5 - DB4
- PIN 6 - DB5
- PIN 7 - DB6
- PIN 8 - DB7 (MSB)
- PIN 9 - LATCH ENABLE (CLK)
- PIN 10 - COMPARATOR OUT (MONITOR POINT)
- PIN 11 - FORCED OUT "ON"
- PIN 12 - ENABLE
- PIN 13 - (-12V)
- PIN 14 - (+12V)
- PIN 15 - GND

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

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
WEBSITE: www.planarmonolithicsindustries.com
E-MAIL: sales@planarmonolithics.com
ISO 9001:2000 CERTIFIED



TITLE		PRODUCT FEATURE	
APPROVALS	DATE	TD-30T-SHS-218-30DBAMP	
DRAWN	9/30/09	2 - 18 GHz THRESHOLD DETECTOR	
CHECKED		SIZE	REV.
		FSQM NO.	
		DWG NO.	
ISSUED		SCALE N:S	SHEET 1 OF 3