

TEST REPORT
ON
2 TO 18 GHz
HIGHLY SENSITIVE
THRESHOLD DETECTOR
PMI MODEL No:
TD-30E-SHS-218-30DBAMP

Serial Number: PM808220

**DESIGNED
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**TESTED
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**REPORTED
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September 10, 2004

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ISO9001 ; 2000 CERTIFIED

JDT *Raw* *X* *RA*
DRH *JKM*
ESC *LC* *AK*

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HIGHLY SENSITIVE THRESHOLD DETECTOR AMC MODEL No: TD-30E-SHS-218-30DBAMP

FEATURES:

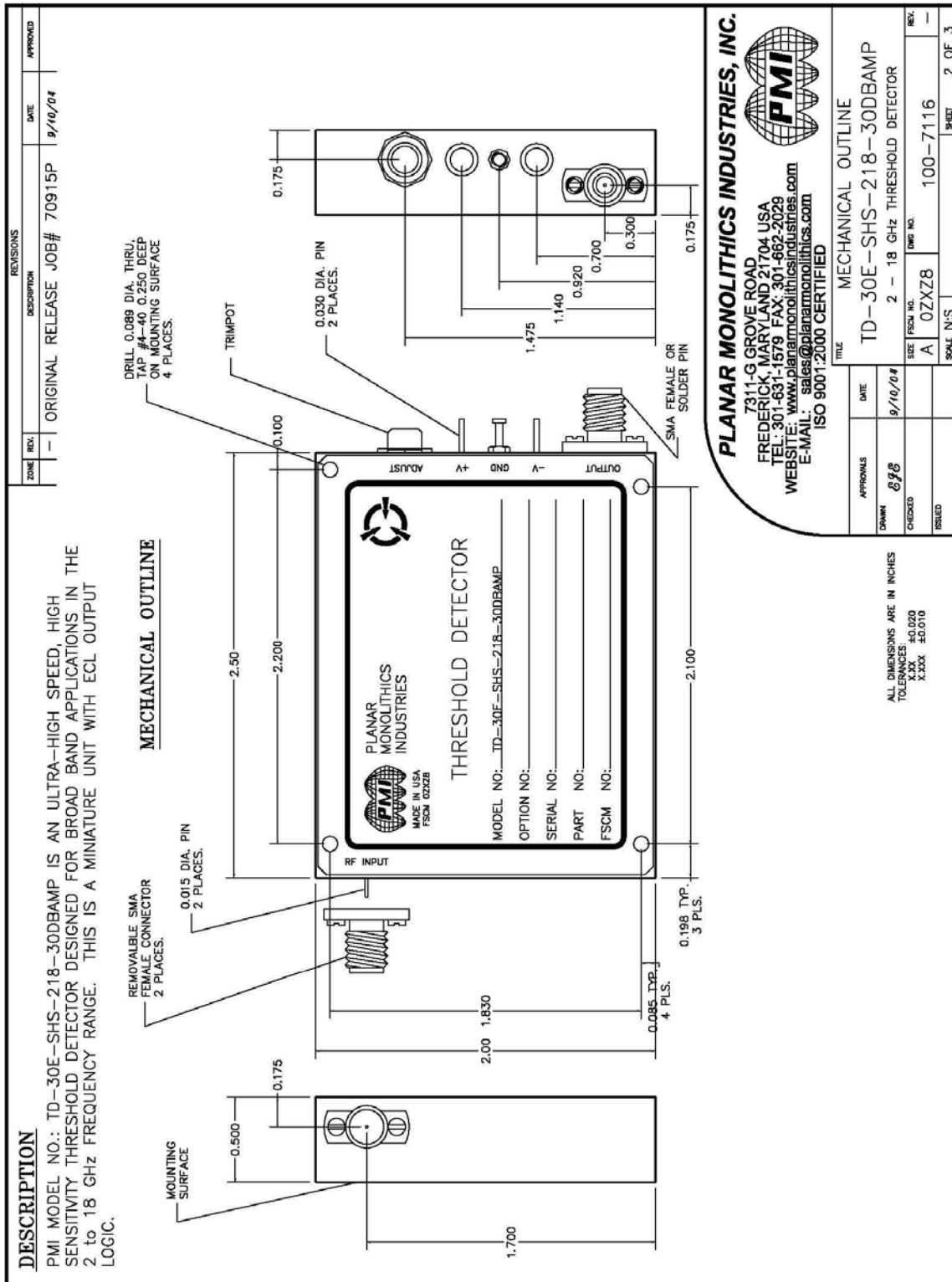
- **HIGH SENSITIVITY**
- **HIGH SPEED**
- **MINIATURE PACKAGE**
- **ECL OUTPUT LOGIC**

SPECIFICATIONS:

- **FREQUENCY** : 2 TO 18 GHz
- **MINIMUM SIGNAL LEVEL FOR THRESHOLD DETECTOR TO RESPOND** : -45 dBm \pm 2.5 dBm
- **PROPAGATION DELAY FROM 50% LOGIC OUTPUT ON LEADING EDGE FOR AN INPUT OF -45 dBm** : 10 nSEC TYPICAL, 20 nSEC MAXIMUM
- **PROPAGATION DELAY FROM 50% RF INPUT TO 50% LOGIC WHEN INPUT -20 dBm** : 10 nSEC TYPICAL, 20 nSEC MAXIMUM
- **DC POWER +12V (NO LOAD)** : 250 mA MAXIMUM
- **DC POWER -12V (NO LOAD)** : 120 mA MAXIMUM



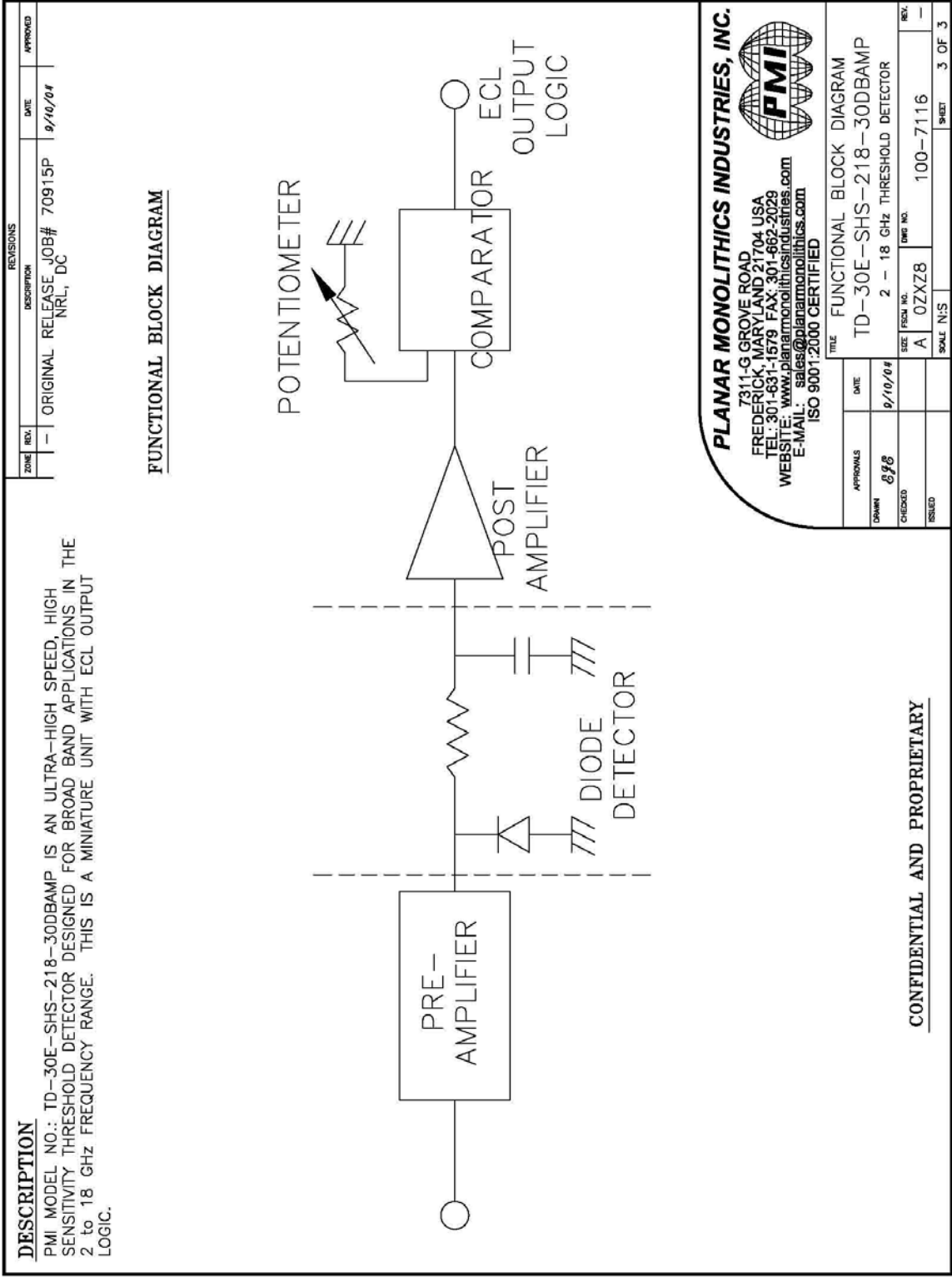
OUTLINE DRAWING



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FUNCTIONAL SCHEMATIC





FINAL TEST DATA

PMI MODEL NO: TD-30E-SHS-218-30DBAMP, SERIAL NUMBER: PM808220

FORM: TD-08/0898



JOB NO: 70915P

SUMMARY TEST DATA
 ON
 HIGH SPEED THRESHOLD DETECTOR

CUSTOMER: NRL
 JOB NO: 70915P
 MODEL NO: TD-30E-SHS-218-30DBAMP
 SERIAL NO: PM808220

TESTED BY: PA
 TEMPERATURE: 25°C
 DATE: 8/7/98

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	Frequency Range	2 - 18 GHz	2-18 GHz	✓
3	Minimum Signal level for threshold detector to respond	-45 dBm ±2.5 dBm	✓	✓
6	Propagation Delay from 50% Logic Output on Leading Edge for an Input of -45 dBm	10 nSEC (Typical) 20 nSEC max.	10 ns	✓
7	Propagation Delay from 50% RF Input to 50% Logic when Input -20 dBm	10 nSEC (Typical) 20 nSEC max.	4 ns	✓
10	D.C. Power +12V (NoLoad)	250 mA (Max)	220 mA	✓
11	D.C. Power -12V (No Load)	120 mA (Max)	118 mA	✓

PRODUCTION MANAGER APPROVAL: _____ DATED: _____

QA/QC APPROVAL: Q2 Rose Marie Cheeks DATED: 8-10-98