

DESCRIPTION

PMI MODEL RFFD-618-730049 IS A 6 TO 18 GHz LOW PASS FILTER COMBINED WITH A SCHOTTKY BIASED DETECTOR INCLUDING A REVERSE VOLTAGE PROTECTION DIODE. A DUPLICATE DETECTOR AND PROTECTION DIODE IS INCLUDED FOR DC OFFSET VOLTAGE COMPENSATION.

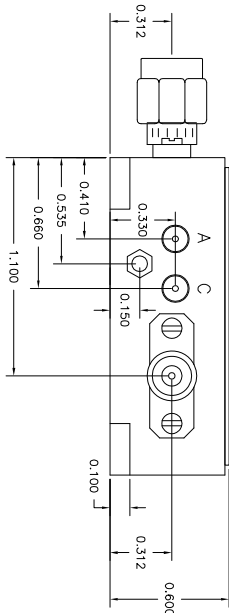
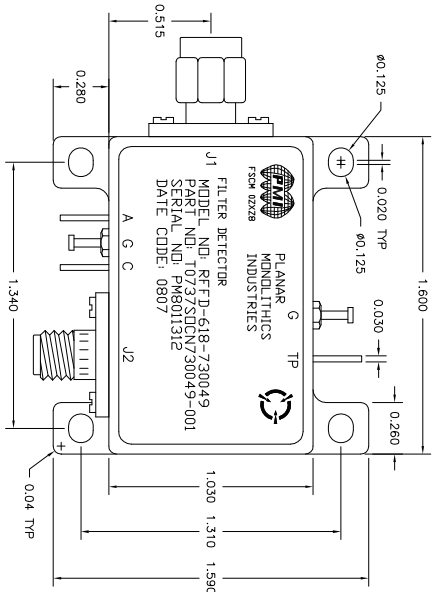
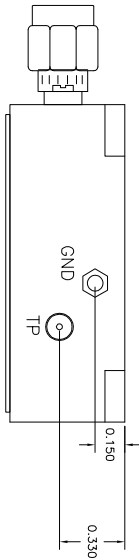
SPECIFICATIONS

- FREQUENCY RANGE: 6 TO 18 GHz
- RETURN LOSS: -10 dB (swr 2:1)
- MAXIMUM INPUT POWER: 7 dBm Operation
- MAXIMUM INPUT POWER: 20 dBm SURVIVAL WITH NO DEGRADATION
- FILTER REJECTION: 23 dB MIN 20 TO 26 GHz
- VOLTAGE SENSITIVITY: 80 TO 140 mV
- BARRIER POTENTIAL: 225 TO 270 mV with 100uA bias to 25 deg C
- OPERATING DYNAMIC RANGE: -23 TO +7 dBm
- FREQUENCY FLATNESS: ± 0.8 dB WITH 1dB TO 2dB TYP. SLOPE
- DIODE VOLTAGE PROTECTION: 1.0 V MAX at 30 mA
- TRACKING DETECTOR-BALANCE: ±20mV MAX over operating temperature
- RF INPUT: FIELD REPLACEABLE SMA (MALE)
- VIDEO OUTPUT: FIELD REPLACEABLE SMA (FEMALE)
- DC CONNECTIONS: FEEDTHROUGH SOLDER PINS

- SIZE: 1.60" x 1.59" x 0.6"

- ENVIRONMENTAL RATINGS
- TEMPERATURE -54°C TO +110°C (OPERATING)
-65°C TO +110°C (STORAGE)
 - HUMIDITY MIL-STD-202, METHOD 106
 - SHOCK MIL-STD-202, METHOD 213 COND. A
 - VIBRATION MIL-STD-810C, CATEGORY B2
 - ALTITUDE MIL-STD-810C, METHOD 504.1
 - THERMAL SHOCK MIL-STD-202, METHOD 107 COND. B

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	A	Original Release	9/11/08
	B	Various Updates	4/22/09



PLANAR MONOLITHICS INDUSTRIES, INC.

7311-G GROVE ROAD
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WEBSITE: www.planarmonolithicsindustries.com
E-MAIL: sales@planarmonolithics.com
ISO 9001:2000 CERTIFIED

PRODUCT FEATURE
RFFD-618-730049
FILTER DETECTOR

TITLE	DATE	APPROVALS
9/11/08		

SIZE	FSQM NO.	DWG NO.	REV.
A	05X00	27008290	B

SCALE N:S 1 OF 3

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ALL DIMENSIONS ARE IN INCHES

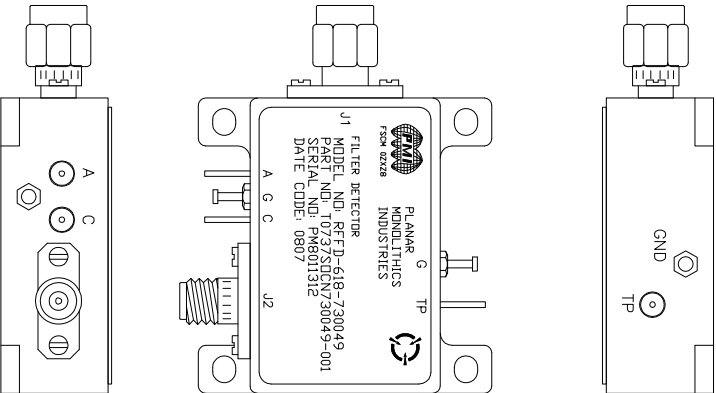
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EXTERNAL MECHANICAL PARTS

ITEM	PART DESCRIPTION	MANUFACTURERS PART NO.
1	SMA Female Connector (J2)	1206-36-PJ (San-Tron, Inc.)
2	SMA Male Connector (J1)	SWM-213-08SF (Southwest Microwave, Inc.)
3	RF Feedthru (J1, J2)	HA-2940 (Hasco)
4	DC Feedthru (TP, A, C)	SHP1330-250-075-02 (Special Hermetic Products)
5	GND Lug (G)	12-703-2-01 (Concord)
6	Gold Plating	50 u" Min Gold Plate over Copper Flash, Nickel Flash, MIL G 45204 TYPE 2 (Nova Kote)
7	Label	LAT-28-773-25SH & LAT-28-722-25SH (Brady)
8	Grey 2 Part Epoxy Paint	MIL-T-81772 Type 2 Thinner, MIL-C-22750D-36231 Grey Kit & MIL-C-23377F Type1 #1006 Yellow Kit (Spectrum Codings)
9	Housing	6061-T6 Aluminum
10	Cover	4047 Aluminum

MATERIAL SAFETY DATA

ALL MATERIALS USED IN THE DEVICE ARE NON-TOXIC AND NO BERYLLIUM
OXIDE OR FORMS OF IT OR COMPOUNDS ARE USED IN THE CONSTRUCTION



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TITL		PRDCT FEATRE	
APPROVALS	DATE	RFFD-618-730049	
DRAWN <i>J. J. J. J. J.</i>	9/11/08	FILTER DETECTOR	
CHECKED			
ISSUED			
SIZE	FSQM NO.	DWG NO.	REV.
A	05X00	27008290	B
SCALE	N:S	SHEET	3 OF 3

ALL DIMENSIONS ARE IN INCHES