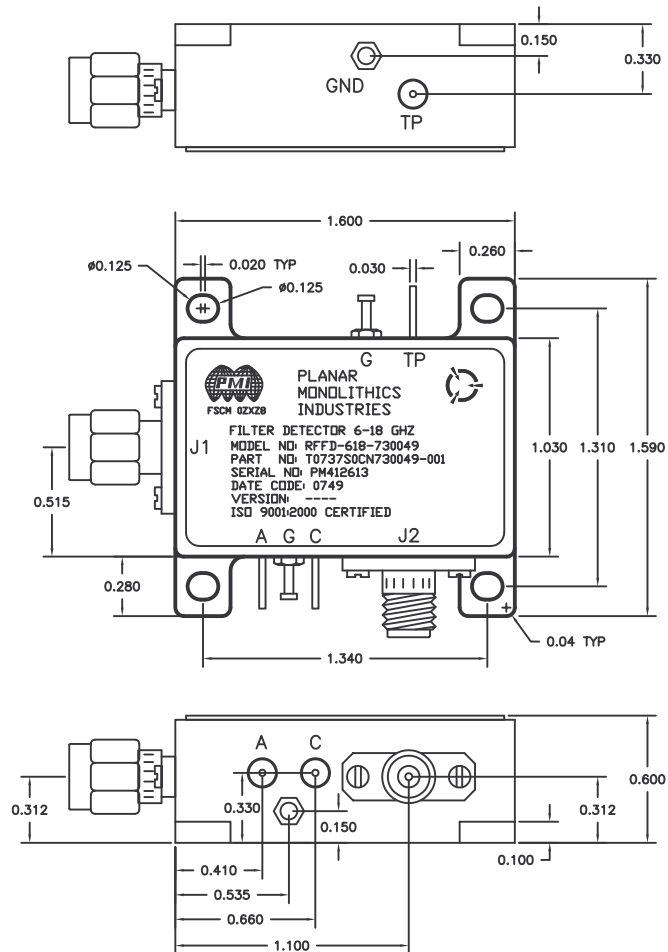


DESCRIPTION

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.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	10/31/07	

MECHANICAL OUTLINE



PRELIMINARY

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-G GROVE ROAD
 FREDERICK, MARYLAND 21704 USA
 TEL: 301-631-1579 FAX: 301-662-2029
 WEBSITE: www.planarmonolithicsindustries.com
 E-MAIL: sales@planarmonolithics.com
 ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>JK</i>		10/31/07	PRODUCT FEATURE RFFD-618-730049			
CHECKED			FILTER DETECTOR			
ISSUED			SIZE A	FSCM NO. OZXZ8	DWG NO. 100-R000-000	REV. -
SCALE N:S			SHEET		2 OF 3	

ALL DIMENSIONS ARE IN INCHES

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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: 15 dB MIN at 19 GHz
- FILTER REJECTION: 30 dB MIN 20 TO 26 GHz
- VOLTAGE SENSITIVITY: TBD \pm 10% mV (RF input of -3dBm at 12 GHz)
- BARRIER POTENTIAL: 190 TO 235 mV with 100uA bias to 25 deg C
- OPERATING DYNAMIC RANGE: -33 TO +7 dBm
- FREQUENCY FLATNESS: \pm 0.7 dB WITH 1dB MAX SLOPE
- DIODE VOLTAGE PROTECTION: 1.0 V MAX at 30 mA
- TRACKING DETECTOR-BALANCE: \pm 20mV MAX over operating temperature

CONNECTORS

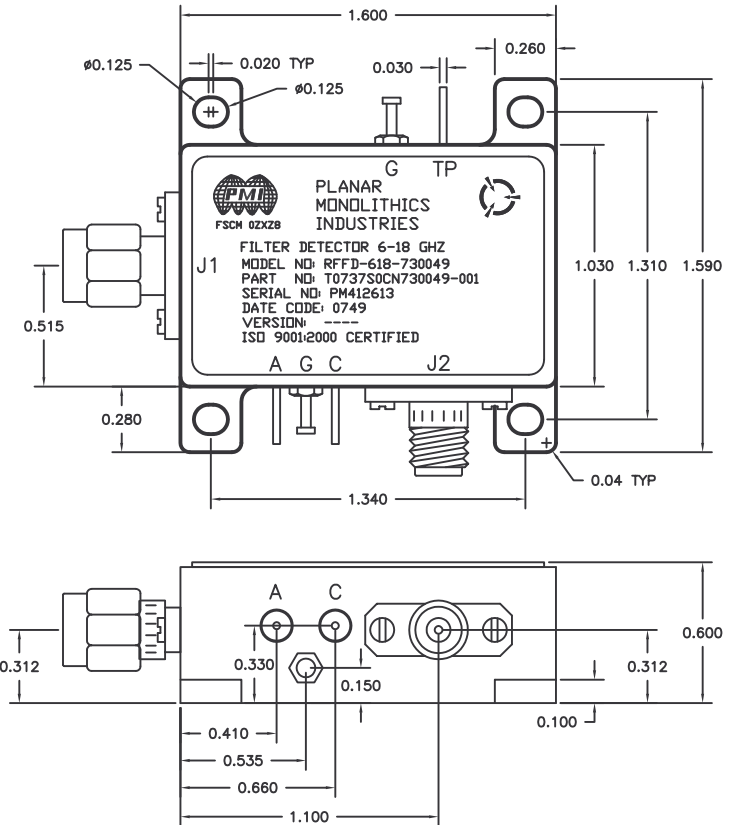
- RF INPUT: FIELD REPLACEABLE SMA (MALE)
- VIDEO OUTPUT: FIELD REPLACEABLE SMA (FEMALE)
- DC CONNECTIONS: FEEDTHROUGH SOLDER PINS

- 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				
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APPROVALS		DATE	TITLE		REV.
DRAWN <i>JX</i>		10/31/07	PRODUCT FEATURE RFFD-618-730049		-
CHECKED			FILTER DETECTOR		
ISSUED			SIZE A	FSCM NO. OZXZ8	DWG NO. 100-R000-000
			SCALE N:S		SHEET 1 OF 3

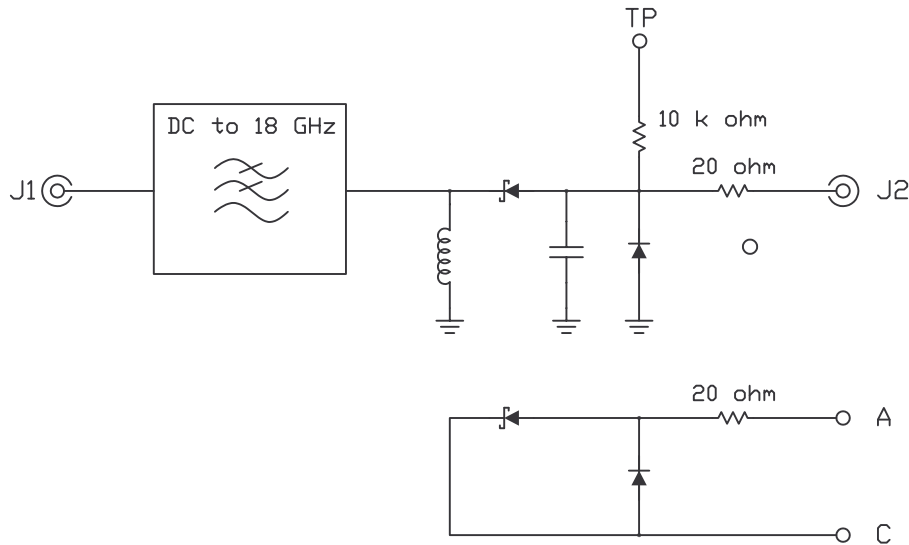
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FUNCTIONAL BLOCK DIAGRAM



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CONFIDENTIAL AND PROPRIETARY

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			A	OZXZ8	100-R000-000	-
			SCALE	N:S	SHEET	3 OF 3