

DESCRIPTION

PMI MODEL NO. CMDA-4D1G6D1G-3TTL-SFF-DP IS A 4.1 GHz TO 6.1 GHz COARSE MICROWAVE DISCRIMINATOR CENTERED AT 5.1 GHz. USING STATE-OF-THE-ART MMIC AND MIC TECHNOLOGY, THE COARSE MICROWAVE DISCRIMINATOR ASSEMBLY CONSISTS OF A FOUR(4) WAY INPHASE POWER DIVIDER WHERE THREE(3) OF THE OUTPUTS CONNECT TO BAND PASS FILTERS WITH CENTER FREQUENCIES OF 4.7 GHz \pm 270 MHz (1 dB BANDWIDTH & 11 POLES), 5.1 GHz \pm 400 MHz (1 dB BANDWIDTH & 16 POLES), AND 5.5 GHz \pm 270 MHz (1 dB BANDWIDTH & 11 POLES) RESPECTIVELY AND THE FOURTH PORT IS A THROUGH PORT TO THE OUTPUT. THE OUTPUT OF EACH BAND PASS FILTER IS CONNECTED INTERNALLY TO SENSITIVE LOW VSWR UNIQUE PMI THRESHOLD DETECTORS HAVING LOW HYSTERESIS CHARACTERISTICS AND WHERE THRESHOLD LEVELS CAN BE ADJUSTED FOR FINE TUNING WITH LOW NOISE RESISTORS.

SPECIFICATIONS

- FREQUENCY RANGE: _____ 4.1 GHz TO 6.1 GHz
- RF INPUT POWER: _____ 7 dBm \pm 3 dBm TYP
- THRESHOLD LEVEL: _____ SET AT -10 dBm IN WITH THRESHOLD VOLTAGE SET TO 2.5 V
- THRESHOLD ADJUST LEVEL: _____ 0 TO 5 V
- RF CONNECTORS: _____ SMA FEMALE
- SIZE: _____ 7.75"(197)[L] X 2.50"(64)[W] X 2.56"(65)[H] MAX
6.75"(171)[L] X 2.00"(51)[W] X 2.50"(63)[H] GOAL
- FINISH: _____ BLUE EPOXY POLIMIDE COATING IAW MIL-C-22750, TYPE I OVER EPOXY POLIMIDE PRIMER IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.

FILTER SPECIFICATIONS

- FILTER 1: _____ Fo: 4.7 GHz
REJECTION: 11 POLE RESPONSE
1 dB BW: \pm 270 MHz
- FILTER 2: _____ Fo: 5.1 GHz
REJECTION: 16 POLE RESPONSE
1 dB BW: \pm 400 MHz
- FILTER 3: _____ Fo: 5.5 GHz
REJECTION: 11 POLE REPNSE
1 dB BW: \pm 270 MHz

ENVIRONMENTAL RATINGS

- TEMPERATURE: _____ -55 °C TO +85 °C (OPERATING)
-65 °C TO +100 °C (STORAGE)
- HUMIDITY: _____ MIL-STD-202F, METHOD 103B COND. B
- SHOCK: _____ MIL-STD-202F, METHOD 213B 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

ALL DIMENSIONS
ARE IN INCHES (mm)
TOLERANCES:
X.XX \pm 0.020
X.XXX \pm 0.010

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	10/30/15	JP, JC, JD

PLANAR MONOLITHICS INDUSTRIES, INC.

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FREDERICK, MARYLAND 21704 USA
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ISO 9001 CERTIFIED



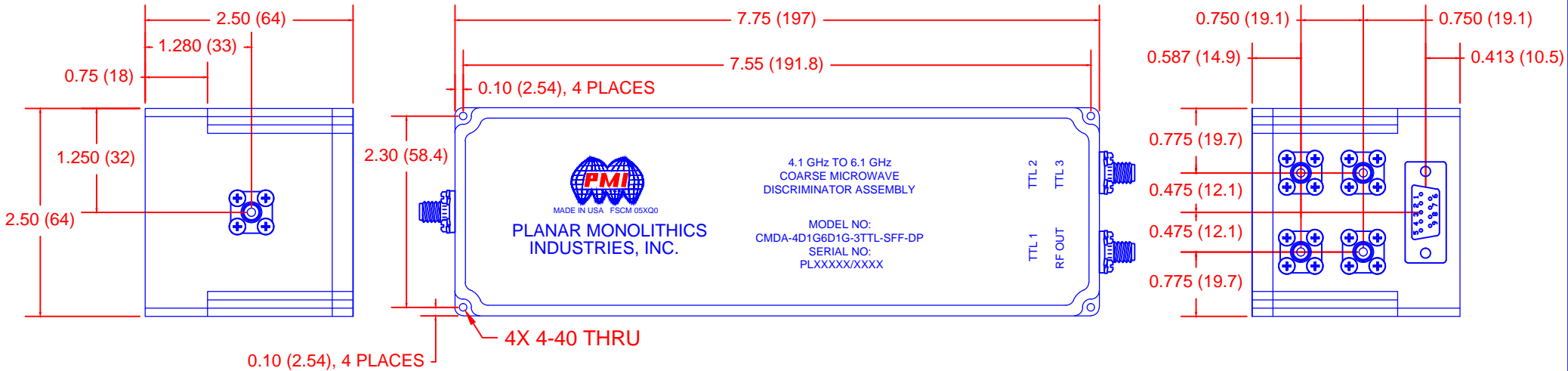
APPROVALS		DATE	TITLE		
DRAWN <i>M. Berry</i>		10/30/15	PRODUCT FEATURE CMDA-4D1G6D1G-3TTL-SFF-DP		
CHECKED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27028322B
ISSUED					REV. 1
SCALE N:S			SHEET 1 OF 3		

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MECHANICAL OUTLINE



ENVIRONMENTAL RATINGS

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-65 °C TO +100 °C (STORAGE)
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X.XXX ±0.010

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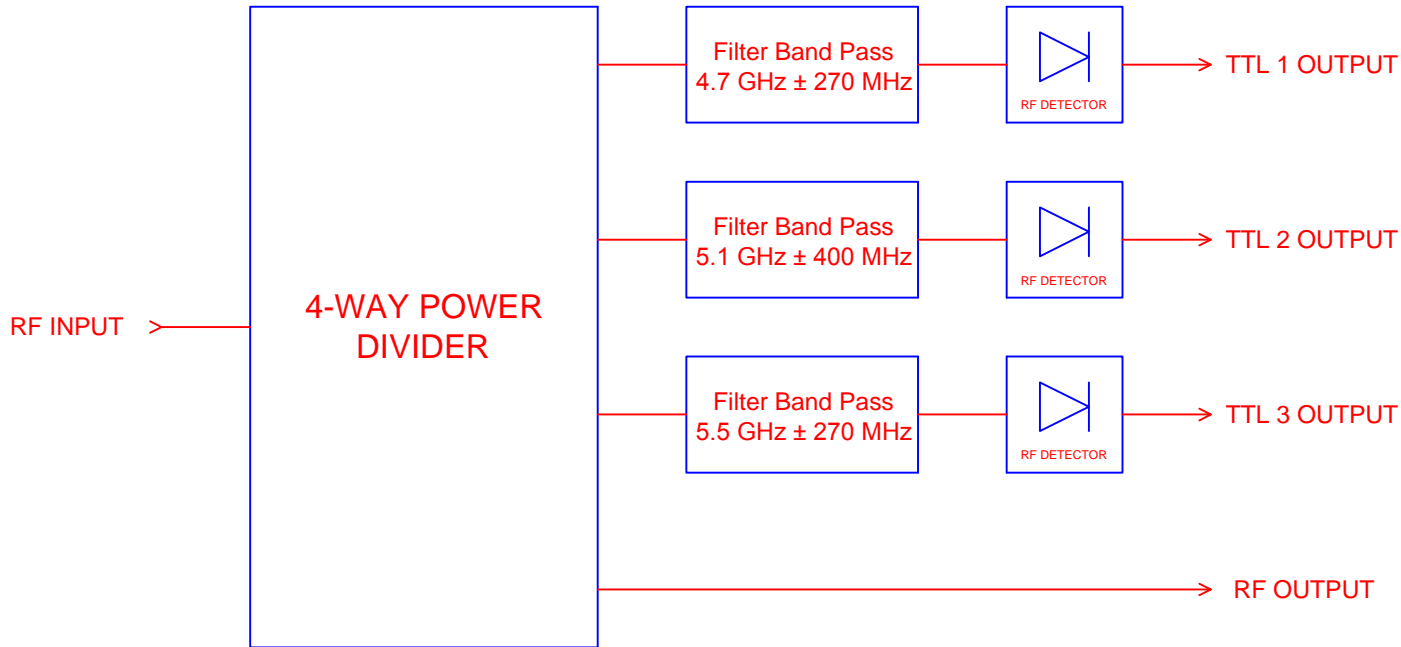
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ISSUED			A	05XQ0	27028322B
			SCALE	N:S	SHEET 2 OF 3
					REV. 1

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PIN OUT TABLE

PIN	FUNCTION
1	V SET (4.7 GHz)
2	+5 V
3	V SET (5.1 GHz)
4	+5 V
5	V SET (5.5 GHz)
6	GND
7	GND
8	+5 V
9	GND

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FUNCTIONAL BLOCK DIAGRAM

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