DESCRIPTION

PMI MODEL: APD-8-DC23G-292FF IS AN EIGHT WAY POWER DIVIDER OPERATING OVER THE DC TO 23.0 GHz FREQUENCY RANGE. THIS MODEL HAS A MAXIMUM INSERTION LOSS OF 2.0 dB FROM 2.0 TO 8.0 GHz AND 3.2 dB MAXIMUM BETWEEN 8.0 TO 18.0 GHz. THE COMPACT 5.0" x 3.7" x .43" HOUSING IS OUTFITTED WITH 2.92 mm FEMALE CONNECTORS.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	11/9/20	

SPECIFICATIONS

•	FREQUENCY RANGE:	DC TO 23.0 GHz
•	INSERTION LOSS: (OVER THEORETICAL POWER SPLIT OF 9 dB)----------	22 to 23 GHz - 7.0 dB Max. 18 to 22 GHz - 5.0 dB Max. 8 to 18 GHz - 3.2 dB Max. 2 to 8 GHz - 2.0 dB Max. 1 to 2 GHz – 2.0 dB Max. 0.5 to 1 GHz – 2.0 dB Max. 300 to 500 MHz - 1.5 dB Max. 200 to 300 MHz - 2.6 dB Max. 100 to 200 MHz - 3.2 dB Max. 80 to 100 MHz - 4.0 dB Max. 20 to 80 MHz -4.5 dB Max. 10 to 20 MHz - 5.0 dB Max.
•	VSWR (INPUT): ----------	22 to 23 GHz - 2.0:1 Typ. 18 to 22 GHz - 2.0:1 Typ. 8 to 18 GHz - 2.0:1 Max. 2 to 8 GHz - 2.1:1 Max. 1 to 2 GHz – 2.4:1 Max. 0.5 to 1 GHz – 2.3:1 Typ. 300 to 500 MHz - 4.0:1 Typ. 200 to 300 MHz - 5.0:1 Typ. 100 to 200 MHz - 6.0:1 Typ. 10 to 100 MHz - 7.0:1 Typ.
•	VSWR (OUTPUT):--------	22 to 23 GHz - 2.0:1 Typ. 8 to 22 GHz - 2.0:1 Typ. 8 to 18 GHz - 2.0:1 Max. 2 to 8 GHz - 2.1:1 Max. 1 to 2 GHz – 2.6:1 Max. 0.5 to 1 GHz – 2.5:1 Typ. 300 to 500 MHz - 2.0:1 Typ. 200 to 300 MHz - 2.5:1 Typ. 100 to 200 MHz - 3.0:1 Typ. 80 to 100 MHz - 4.0:1 Typ. 10 to 80 MHz - 7.0:1 Typ.
•	Insertion Loss Flatnness:--- (Ref Line of Best Fit)	0.5 to 23 GHz - ± 2 dB Max. 10 MHz to 500 MHz - ± 2 dB Max.

•	ISOLATION: ----------	22 to 23 GHz - 10 dB Typ. 18 to 22 GHz - 15 dB Typ. 8 to 18 GHz - 20 dB Typ. 2 to 8 GHz - 20 dB Typ. 1 to 2 GHz - 10 dB Typ. 0.5 to 1 GHz - 10 dB Typ. 100 to 500 MHz - 5.dB Typ. 40 to 100 MHz - 7 dB Typ. 10 to 40 MHz - 12 dB Typ.
•	AMPLITUDE BALANCE: -----	22 to 23 GHz - ± 2 dB Max. 18 to 22 GHz - ± 1.2 dB Max. 8 to 18 GHz - ± 0.5 dB Max. 2 to 8 GHz - ± 0.3 dB Max. 1 to 2 GHz - ± 0.5 dB Max. 0.5 to 1 GHz - ± 0.5 dB Max. 10 to 500 MHz - ± 0.5.dB Max.
•	PHASE BALANCE: ----------	22 to 23 GHz - 20° Max. 18 to 22 GHz - 15° Max. 8 to 18 GHz - 10° Max. 2 to 8 GHz - 4° Max. 1 to 2 GHz - 3° Max. 0.5 to 1 GHz - 5° Max. 10 to 500MHz - 5° Max
•	AVERAGE POWER: -------	25 WATTS (INTO 1.2:1 LOAD VSWR)
•	CONNECTORS: ----------	2.92 mm FEMALE REMOVABLE
•	SIZE: ----------	5.00" x 3.70" x 0.43" [127.1 x 94.0 x 10.9 mm] EXCLUDING CONNECTORS
•	FINISH: ----------	PAINTED BLUE

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PMI PLANAR MONOLITHICS

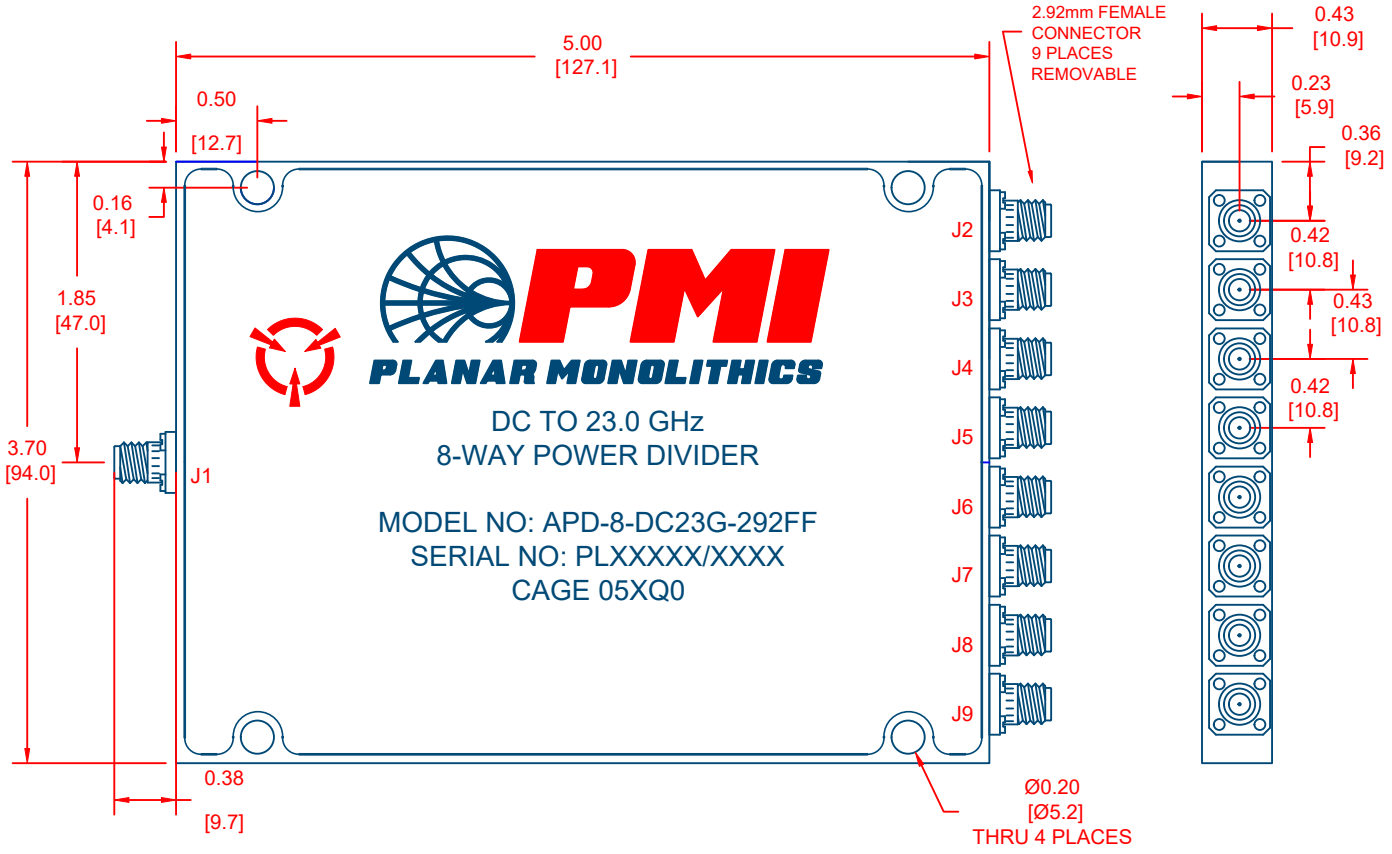
APPROVALS	DATE
DRAWN SMH	9/22/20
CHECKED	
ISSUED	

TITLE
PRODUCT FEATURE
APD-8-DC23G-292FF
DC to 23.0 GHz Eight Way Power Divider

SIZE	FSCM NO.	DWG NO.	REV.
A	05XQ0	27039027	A1

SCALE N:S SHEET 1 OF 3

MECHANICAL OUTLINE



ALL DIMENSIONS
ARE IN mm [INCH]
TOLERANCES:
X.XX ± 0.508 [0.020]
X.XXX ± 0.254 [0.010]

ENVIRONMENTAL RATINGS

- TEMPERATURE: ---------- -55 °C TO +85 °C (OPERATING)
  -65 °C TO +125 °C (STORAGE)
- HUMIDITY: ---------- MIL-STD-202, METHOD 103B COND. B
- SHOCK:---------- MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ---------- MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: ---------- MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: -- MIL-STD-202, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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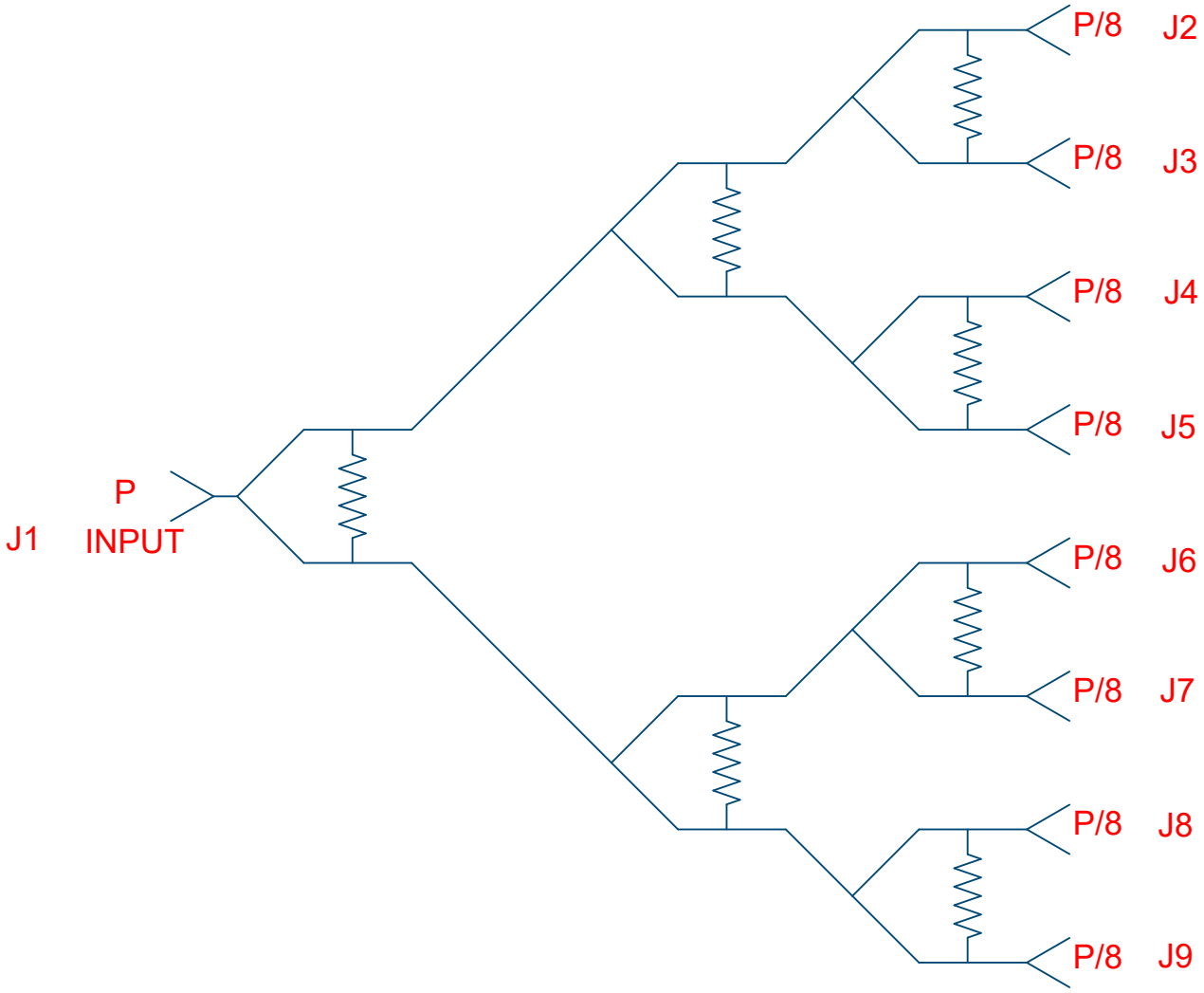
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SCALE N:S SHEET 2 OF 3



BLOCK DIAGRAM

DC to 23 GHz

8 Way Power Divider

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