

# 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.

# 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 Flatness:--- (Ref Line of Best Fit)	0.5 to 23 GHz - ± 2 dB Max. 10 MHz to 500 MHz - ± 2 dB Max.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	09/22/20	

●	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 - 5.0 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

## PLANAR MONOLITHICS INDUSTRIES, INC.

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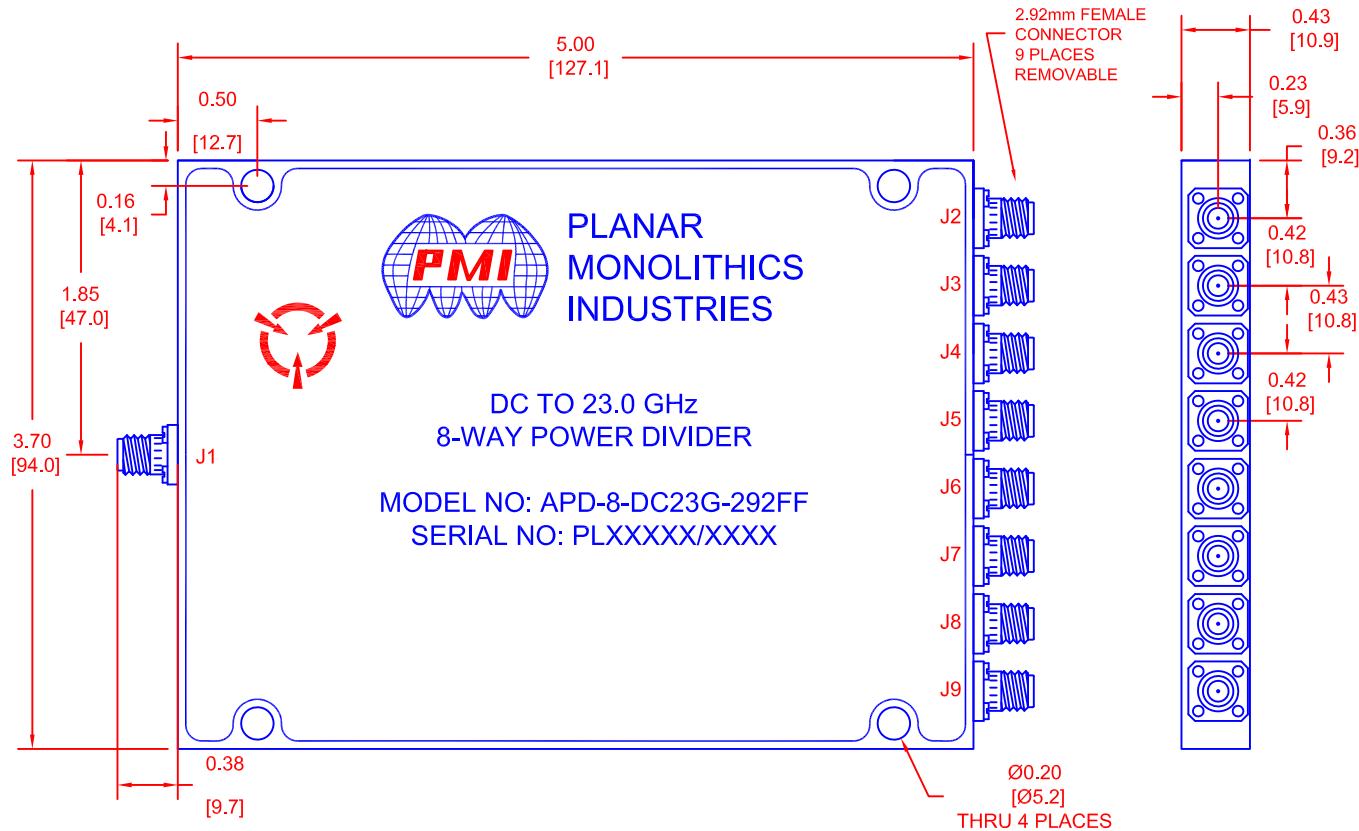
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN		9/22/20	PRODUCT FEATURE		
CHECKED			APD-8-DC23G-292FF		
ISSUED			DC to 23.0 GHz Eight Way Power Divider		
SIZE	FSCM NO.	DWG NO.	REV.		
A	05XQ0	27039020	A1		
SCALE	N:S	SHEET	1 OF 3		

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# 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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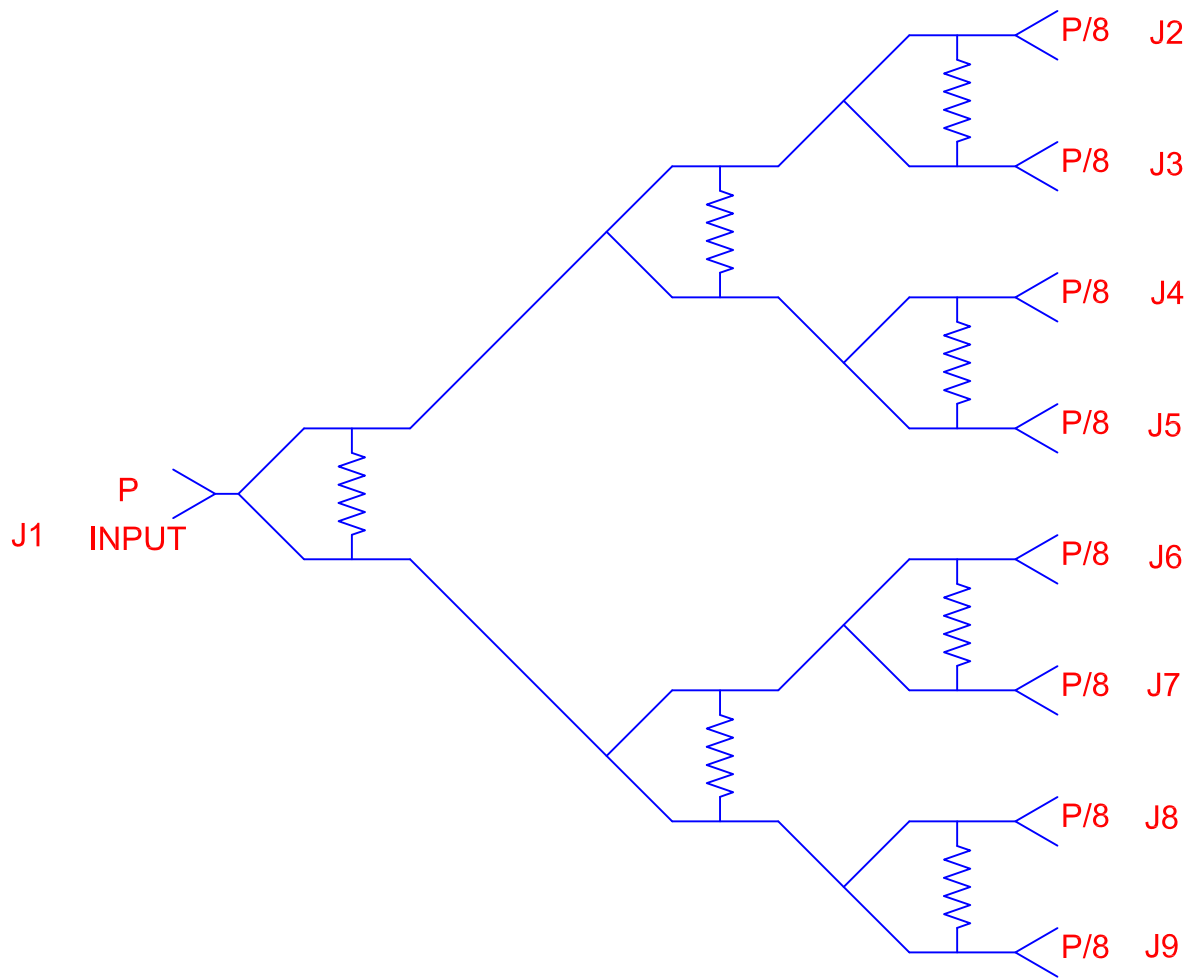
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APPROVALS		DATE		TITLE <b>PRODUCT FEATURE</b> <b>APD-8-DC23G-292FF</b> DC to 23.0 GHz Eight Way Power Divider			
DRAWN <i>JMJ</i>		9/22/20		SIZE	FSCM NO.	DWG NO.	REV.
CHECKED		ISSUED		A	05XQ0	27039020	A1
				SCALE	N:S	SHEET	2 OF 3



**BLOCK DIAGRAM**

**DC to 23 GHz**

**8 Way Power Divider**

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CHECKED			APD-8-DC23G-292FF		
ISSUED			DC to 23.0 GHz Eight Way Power Divider		
SIZE	FSCM NO.	DWG NO.	REV.		
A	05XQ0	27039020	A1		
SCALE N:S		SHEET		3 OF 3	