

DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER P6P-0D518-S7F IS A HEXAPLEXER COVERING 0.5 TO 18 GHz. THE UNIT IS BANDED AS FOLLOWS 0.5-1 GHz, 1-2 GHz, 2-4 GHz, 4-8 GHz, 8-12 GHz AND 12-18 GHz, WITH A RF SURVIVAL INPUT POWER OF 1W CW.

SPECIFICATIONS:

- RF INPUT FREQUENCY RANGE:..... 0.5 TO 18.0 GHz
- RF SURVIVAL INPUT POWER:..... +30 dBm (1 WATT) CW MAX
- CROSSOVER INSERTION LOSS:..... 1 GHz ± 2%: 5 dB TYP., 6 dB MAX
 2 GHz ± 2%: 5 dB TYP., 6 dB MAX
 4 GHz ± 2%: 5 dB TYP., 6 dB MAX
 8 GHz ± 2%: 5 dB TYP., 6 dB MAX
 12 GHz ± 2%: 5 dB TYP., 6 dB MAX

BAND 1 (J1):

- FREQUENCY RANGE:..... 0.5 TO 1.0 GHz
- INSERTION LOSS:..... 2.5 dB MAX @ 0.6 TO 0.9 GHz
- RETURN LOSS (OVER INSERTION LOSS BAND): 12 dB MIN
- REJECTION:..... -40 dBc MIN @ DC TO 0.2 GHz, 1.3 TO 20 GHz

BAND 2 (J2):

- FREQUENCY RANGE:..... 1.0 TO 2.0 GHz
- INSERTION LOSS:..... 1.5 dB MAX @ 1.1 TO 1.9 GHz
- RETURN LOSS (OVER INSERTION LOSS BAND): 12 dB MIN
- REJECTION:..... -40 dBc MIN @ DC TO 0.7 GHz, 2.3 TO 20 GHz

BAND 3 (J3):

- FREQUENCY RANGE:..... 2.0 TO 4.0 GHz
- INSERTION LOSS:..... 2.0 dB MAX @ 2.1 TO 3.9 GHz
- RETURN LOSS (OVER INSERTION LOSS BAND): 12 dB MIN
- REJECTION:..... -35 dBc MIN @ DC TO 1.7 GHz, 4.3 TO 20 GHz

BAND 4 (J4):

- FREQUENCY RANGE:..... 4.0 TO 8.0 GHz
- INSERTION LOSS:..... 1.5 dB MAX @ 4.2 TO 7.8 GHz
- RETURN LOSS (OVER INSERTION LOSS BAND): 12 dB MIN
- REJECTION:..... -35 dBc MIN @ DC TO 3.6 GHz, 8.3 TO 20 GHz

BAND 5 (J5):

- FREQUENCY RANGE:..... 8.0 TO 12.0 GHz
- INSERTION LOSS:..... 1.5 dB MAX @ 8.4 TO 11.6 GHz
- RETURN LOSS (OVER INSERTION LOSS BAND): 10 dB MIN
- REJECTION:..... -35 dBc MIN @ DC TO 7.7 GHz, 12.6 TO 20 GHz

BAND 6 (J6):

- FREQUENCY RANGE:..... 12.0 TO 18.0 GHz
- INSERTION LOSS:..... 1.5 dB MAX @ 12.6 TO 17.8 GHz
- RETURN LOSS (OVER INSERTION LOSS BAND): 10 dB MIN
- REJECTION:..... -35 dBc MIN @ DC TO 11.7 GHz, 19.3 TO 20 GHz

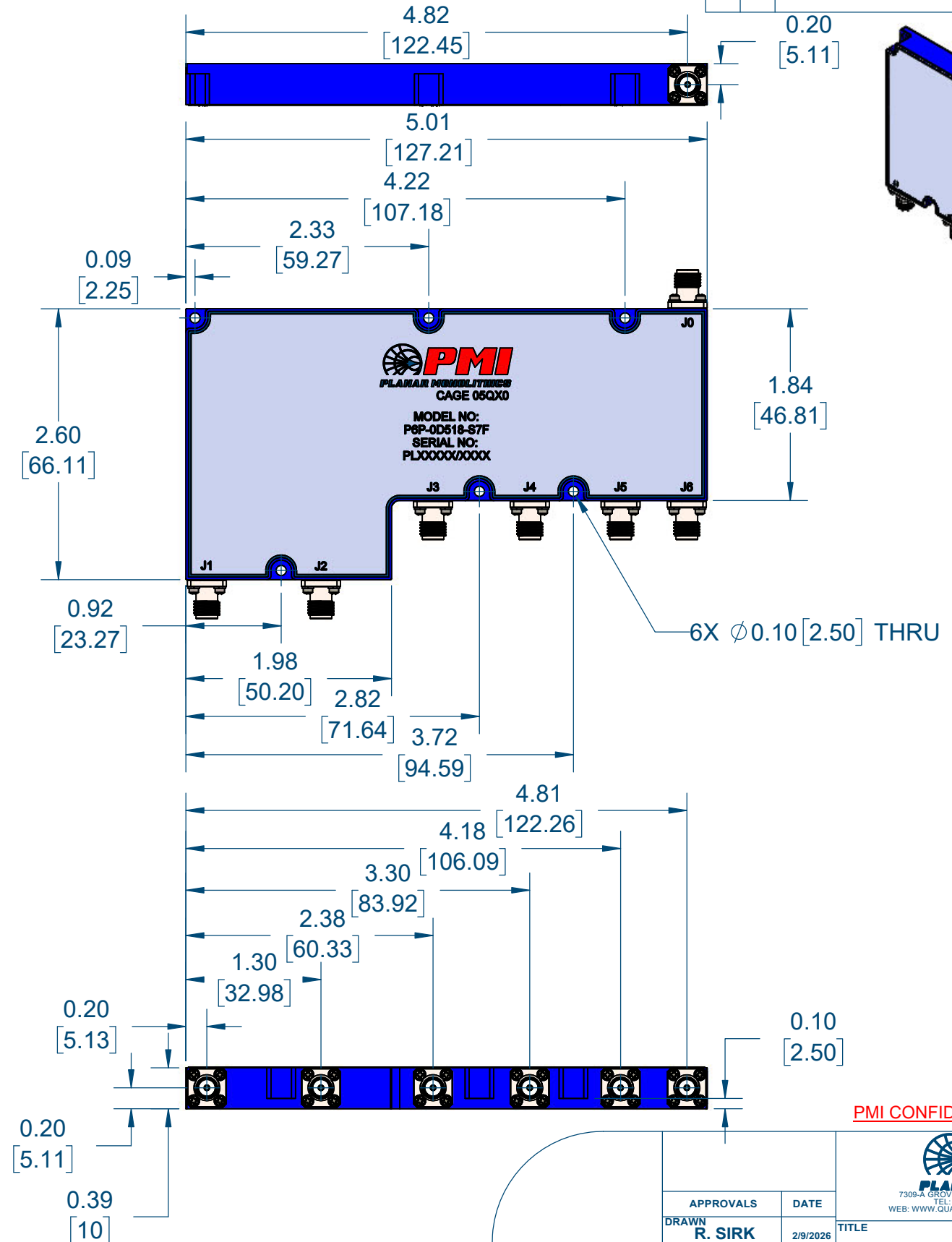
- SIZE:..... 5.01" X 2.6" X 0.39"
- FINISH:..... PAINTED BLUE

ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -40°C TO +85°C (OPERATING)
 -65°C TO +125°C (STORAGE)

NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE
 NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	2/9/2026	



PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS		DATE	TITLE	
DRAWN	R. SIRK	2/9/2026	OUTLINE	
REDRAWN			P6P-0D518-S7F	
ISSUED			SIZE	FSCM NO.
			B	05XQ0
			DWG NO.	27054020
			REV.	A1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:			SCALE 1:1	
FRACTIONS	DECIMALS	ANGLES	SHEET 1 OF 1	
±	.XX ± 0.02	±		
	.XXX ± 0.01			



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