

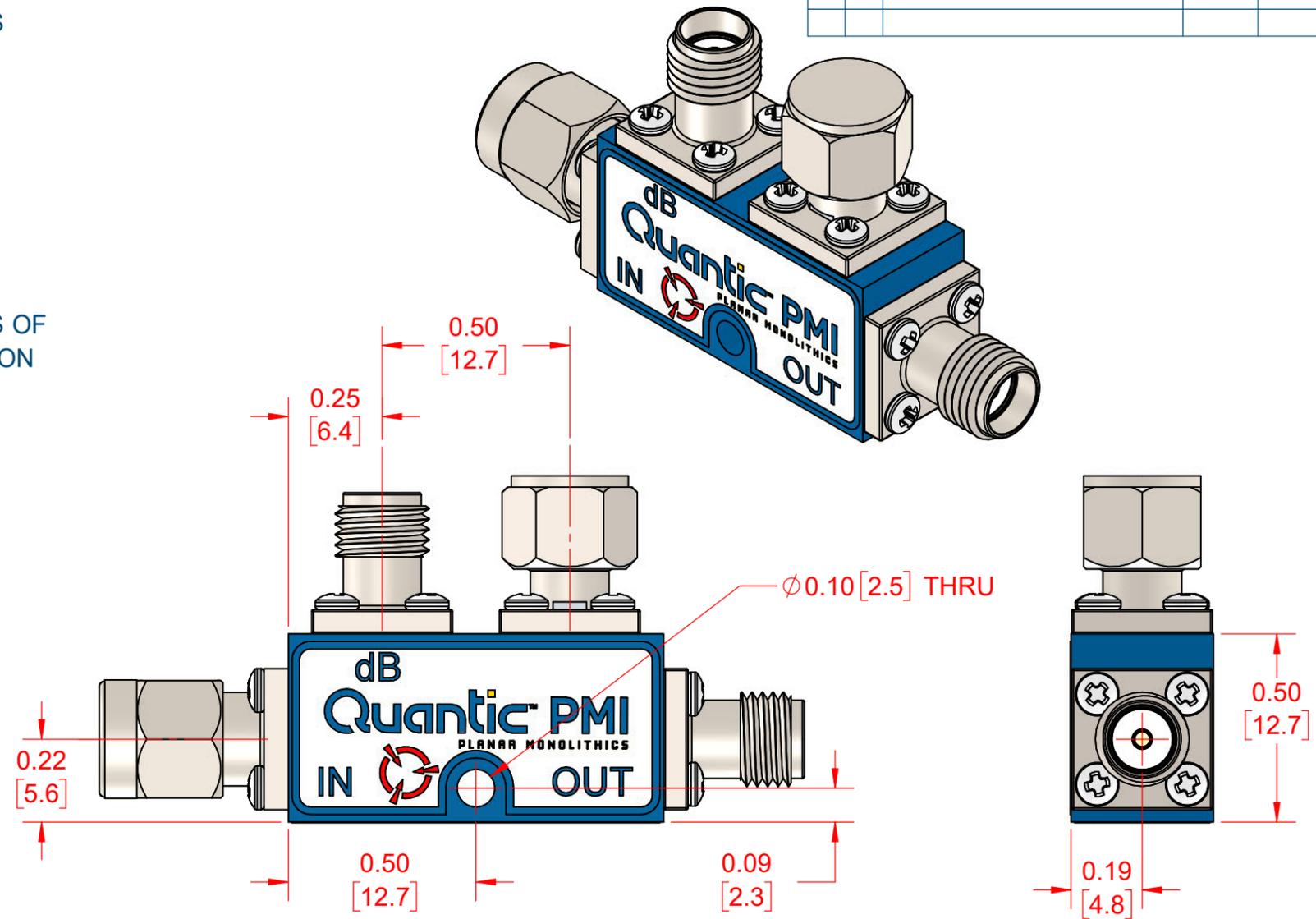
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	7/21/2025	

DESCRIPTION:

PMI MODEL NO. PDC-7G12D4G-20-3KW-SMF IS A 7 GHz TO 12.4 GHz DIRECTIONAL COUPLER. IT HAS A MINIMUM DIRECTIVITY OF 17 dB, AND A MAXIMUM INSERTION LOSS OF 0.4 dB. IT IS OUTFITTED WITH AN SMA MALE CONNECTOR FOR THE INPUT PORT, AND SMA FEMALE CONNECTORS FOR OUTPUT AND COUPLED PORT.

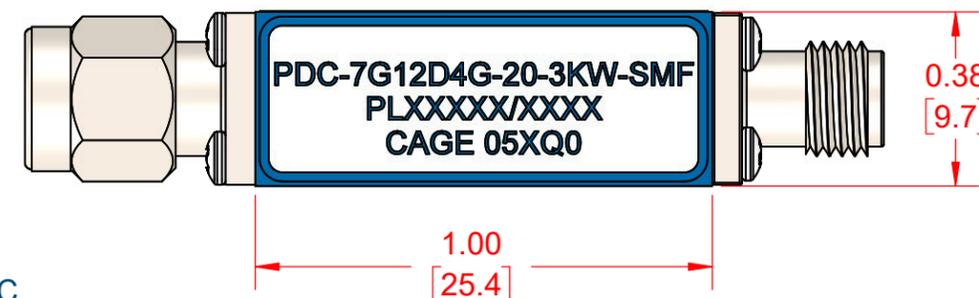
SPECIFICATIONS:

- FREQUENCY RANGE:..... 7.0 TO 12.4 GHz
- COUPLING INCLUDING FREQUENCY SENSITIVITY:.. 20±1.25 dB
- DIRECTIVITY:..... 17 dB MINIMUM
- INSERTION LOSS:..... 0.4 dB MAXIMUM
(THEORETICAL COUPLING LOSS OF 0.044 REMOVED FROM INSERTION)
- VSWR (PRIMARY LINE):..... 1.30:1 MAXIMUM
- VSWR (SECONDARY LINE):..... 1.30:1 MAXIMUM
- POWER INPUT:..... AVERAGE: 50 W
PEAK: 3 kW MAXIMUM
1 μsec PULSE WIDTH
0.1% DUTY CYCLE
AVERAGE REF: 50 W
- CONNECTORS:..... INPUT: SMA MALE
OUTPUT: SMA FEMALE
COUPLED PORT: SMA FEMALE
- SIZE:..... 1.00" X 0.5" X 0.38"
- FINISH:..... PAINTED BLUE



ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... 0°C TO +65°C (OPERATING)
-40°C TO +70°C (STORAGE)
- HUMIDITY:..... UP TO 95% RELATIVE HUMIDITY WITH CONDENSATION
- SHOCK:..... 50 G'S PEAK HALF-SINEWAVE
6 mSEC DURATION
VELOCITY CHANGE OF 9.2 FT PER SEC
- VIBRATION:..... 4-15 Hz @ 0.110 ± 0.006 in. AMPLITUDE (1.26 G's PEAK)*
16-33 Hz @ 0.080 ± 0.004 in. AMPLITUDE (4.4 G's PEAK)*
34-40 Hz @ 0.005 ± 0.001 in. AMPLITUDE (0.8 G's PEAK)*
41-50 Hz @ 0.003 +0.000/-0.001 in. AMPLITUDE (0.75 G's PEAK)*
*IN THREE MUTUALLY PERPENDICULAR DIRECTIONS OVER A MINIMUM OF TWO HOURS



PMI CONFIDENTIAL AND PROPRIETARY

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

APPROVALS		DATE	Quantic PMI PLANAR MONOLITHICS			
DRAWN	VP	7/21/2025	7309-A GROVE ROAD FREDERICK MARYLAND 21704 USA TEL: (301) 662-5019, FAX: (301) 662-1731 WEB: WWW.QUANTICPMI.COM, EMAIL: SALES@QUANTICPMI.COM ISO 9001 CERTIFIED			
REDRAWN			TITLE OUTLINE PDC-7G12D4G-20-3KW-SMF			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			B	05XQ0	27051940	A1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± ± .XXX ± 0.01			SCALE 5:2			SHEET 1 OF 1