

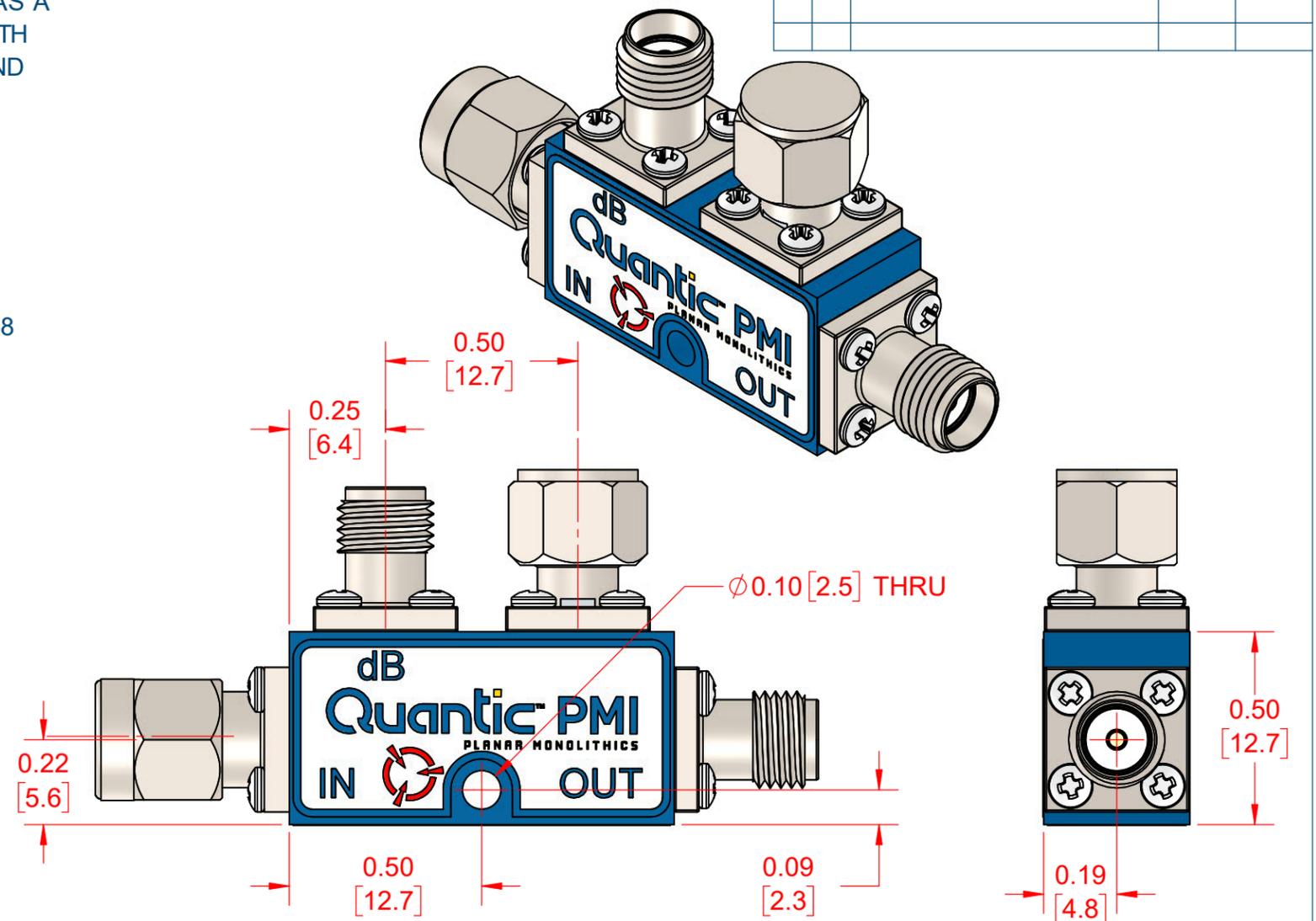
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	7/21/2025	

**DESCRIPTION:**

PMI MODEL NO. PDC-7G12D4G-10-3KW-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 INPUT PORT, AND SMA FEMALE CONNECTORS FOR OUTPUT AND COUPLED PORT.

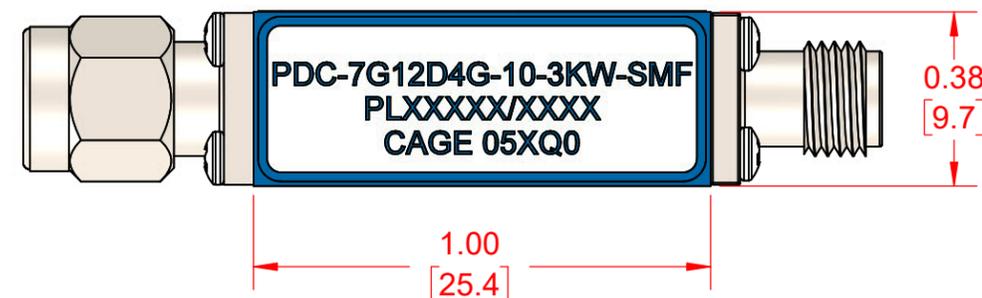
**SPECIFICATIONS:**

- FREQUENCY RANGE:..... 7.0 TO 12.4 GHz
- COUPLING INCLUDING FREQUENCY SENSITIVITY:.. 10±1.25 dB
- DIRECTIVITY:..... 17 dB MINIMUM
- INSERTION LOSS:..... 0.4 dB MAXIMUM  
(THEORETICAL COUPLING LOSS OF 0.458 REMOVED FROM INSERTION LOSS)
- 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: 10 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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± XXX ± 0.01		APPROVALS		DATE	<b>Quantic PMI</b> PLANAR MONOLITHICS 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	
DRAWN		VP		7/21/2025	TITLE	
REISSUED		REISSUED			OUTLINE	
ISSUED		ISSUED			PDC-7G12D4G-10-3KW-SMF	
SIZE	FSCM NO.	DWG NO.	REV.			
B	05XQ0	27051920	A1			
SCALE 5:2			SHEET 1 OF 1			