



**TYPICAL CHARACTERISTICS
ON
PDC-800M2D5G-10C-SFF-50W**

PMI MODEL PDC-800M2D5G-10C-SFF-50W IS A 800 MHz TO 2.5 GHz DIRECTIONAL COUPLER HAVING A 10 dB COUPLING FACTOR AND >20 dB DIRECTIVITY. THIS MODEL HANDLES AN INPUT POWER OF 50 WATTS.



AUGUST 3, 2015

DESIGNED BY: PMI ENGINEERING

**TESTED & REPORTED BY:
SIMON KUHN**

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DESCRIPTION

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SPECIFICATIONS

- FREQUENCY RANGE: 0.8 TO 2.5 GHz
- INSERTION LOSS: ≤ 0.5 dB (EXCLUDING COUPLED POWER)
- VSWR: $\leq 1.20:1$
- DIRECTIVITY: 20 dB MINIMUM
- COUPLING: 10 ± 1.0 dB
- FREQUENCY SENSITIVITY: ± 0.7 dB
- POWER HANDLING: AVERAGE ≤ 50 W
PEAK ≤ 1 kW
- IMPEDANCE: 50 Ω
- CONNECTORS: SMA FEMALE (X3)
- FINISH: PAINTED BLUE

ENVIRONMENTAL RATINGS

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

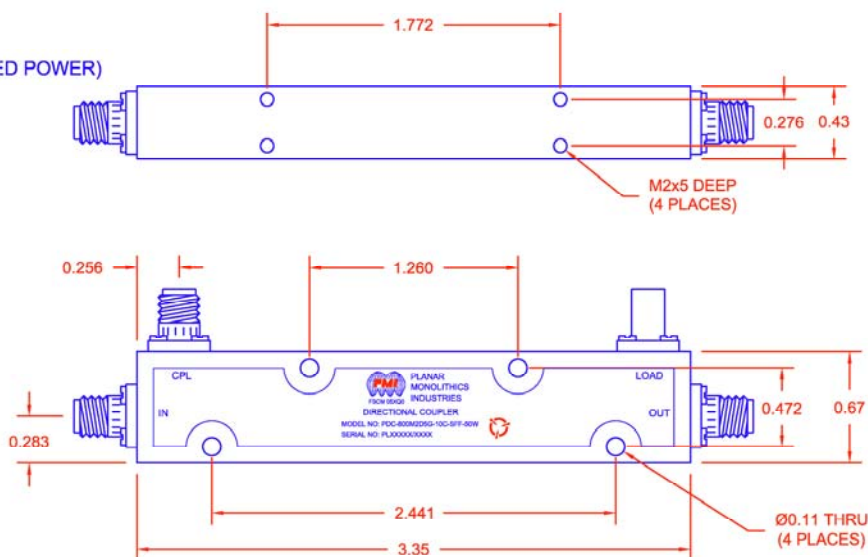
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ± 0.020
X.XXX ± 0.010

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	A1	ORIGINAL RELEASE	05/15/15

MECHANICAL OUTLINE



PLANAR MONOLITHICS INDUSTRIES, INC.
7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: (301)-662-5019, FAX: (301)-662-1731
WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN	<i>M. Berry</i>		05/15/15	SIZE	FROM NO.
CHECKED				A	05XQ0
ISSUED				27025741	REV. A1
SCALE: N:S		SHEET		1 OF 1	



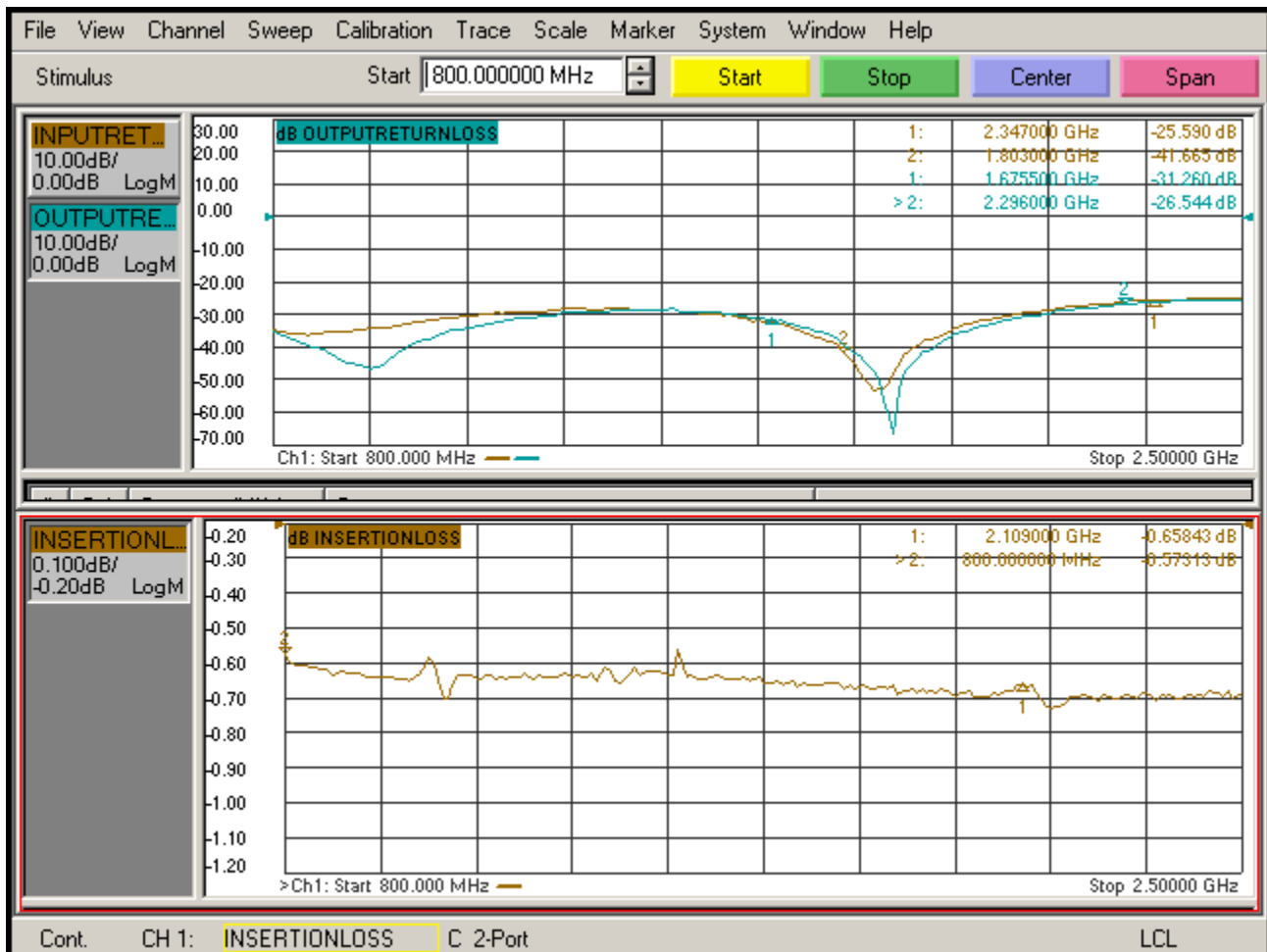
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ON
PDC-800M2D5G-10C-SFF-50W**

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range	0.8 TO 2.5 GHz	0.8 TO 2.5 GHz	
2	Insertion Loss	≤ 0.5 dB (Excluding Coupled Power)	0.19 dB (See Plot)	
3	VSWR	$\leq 1.20:1$	1.12 :1 (See Plot)	
4	Directivity	20 dB Minimum	26.00 dB (See Plot)	
5	Coupling	10 ± 1.0 dB	10 ± 0.56 dB (See Plot)	
6	Frequency Sensitivity	$\leq \pm 0.7$ dB	± 0.28 dB (See Plot)	
7	Power Handling	Average ≤ 50 W Peak ≤ 1 kW	Average ≤ 50 W Peak ≤ 1 kW	
8	Impedance	50 Ω	50 Ω	



TYPICAL CHARACTERISTICS ON PDC-800M2D5G-10C-SFF-50W

Insertion Loss and Return Loss





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Directivity





TYPICAL CHARACTERISTICS ON PDC-800M2D5G-10C-SFF-50W

Coupling and Frequency Sensitivity

