



**TYPICAL CHARACTERISTICS  
ON  
PDC-800M2D5G-30C-NFF-60W**

**PMI MODEL PDC-800M2D5G-30C-NFF-60W IS A 800 MHz TO 2.5 GHz DIRECTIONAL COUPLER HAVING A 30 dB COUPLING FACTOR AND >20 dB DIRECTIVITY. THIS MODEL HANDLES AN INPUT POWER OF 60 WATTS.**



**AUGUST 6, 2015**

**DESIGNED BY: PMI ENGINEERING**

**TESTED & REPORTED BY:  
BOB WAKENIGHT**

**Page 1 of 6**



## TYPICAL CHARACTERISTICS ON PDC-800M2D5G-30C-NFF-60W

### DESCRIPTION

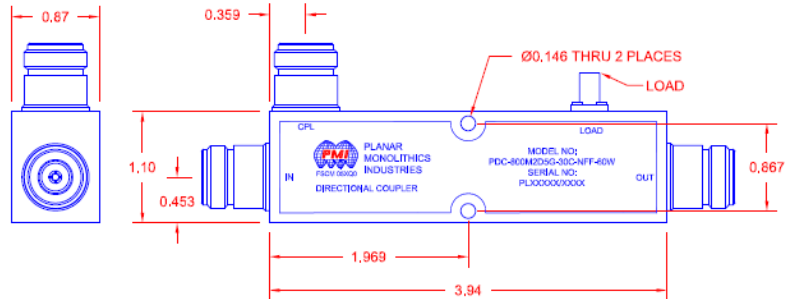
PMI MODEL PDC-800M2D5G-30C-NFF-60W IS A 800 MHz TO 2.5 GHz DIRECTIONAL COUPLER HAVING A 30 dB COUPLING FACTOR AND >20 dB DIRECTIVITY. THIS MODEL HANDLES AN INPUT POWER OF 60 WATTS.

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

### MECHANICAL OUTLINE

### SPECIFICATIONS

- FREQUENCY RANGE: ——— 0.8 TO 2.5 GHz
- INSERTION LOSS: ——— ≤0.4 dB (EXCLUDING COUPLED POWER)
- VSWR: ——— ≤1.25:1
- DIRECTIVITY: ——— 20 dB MINIMUM
- COUPLING: ——— 30±1.0 dB MAXIMUM
- FREQUENCY SENSITIVITY: — ±0.7 dB
- POWER HANDLING: ——— AVERAGE ≤60 W  
PEAK ≤1 kW
- IMPEDANCE: ——— 50 Ω
- CONNECTORS: ——— N-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

**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. Benny</i>		05/15/15		PRODUCT FEATURE PDC-800M2D5G-30C-NFF-60W	
CHECKED:		SIZE: A	FRON NO: 05XQ0	DWG NO: 27025841	REV: A1
FILED:		SCALE: N:S		SHEET: 1 OF 1	



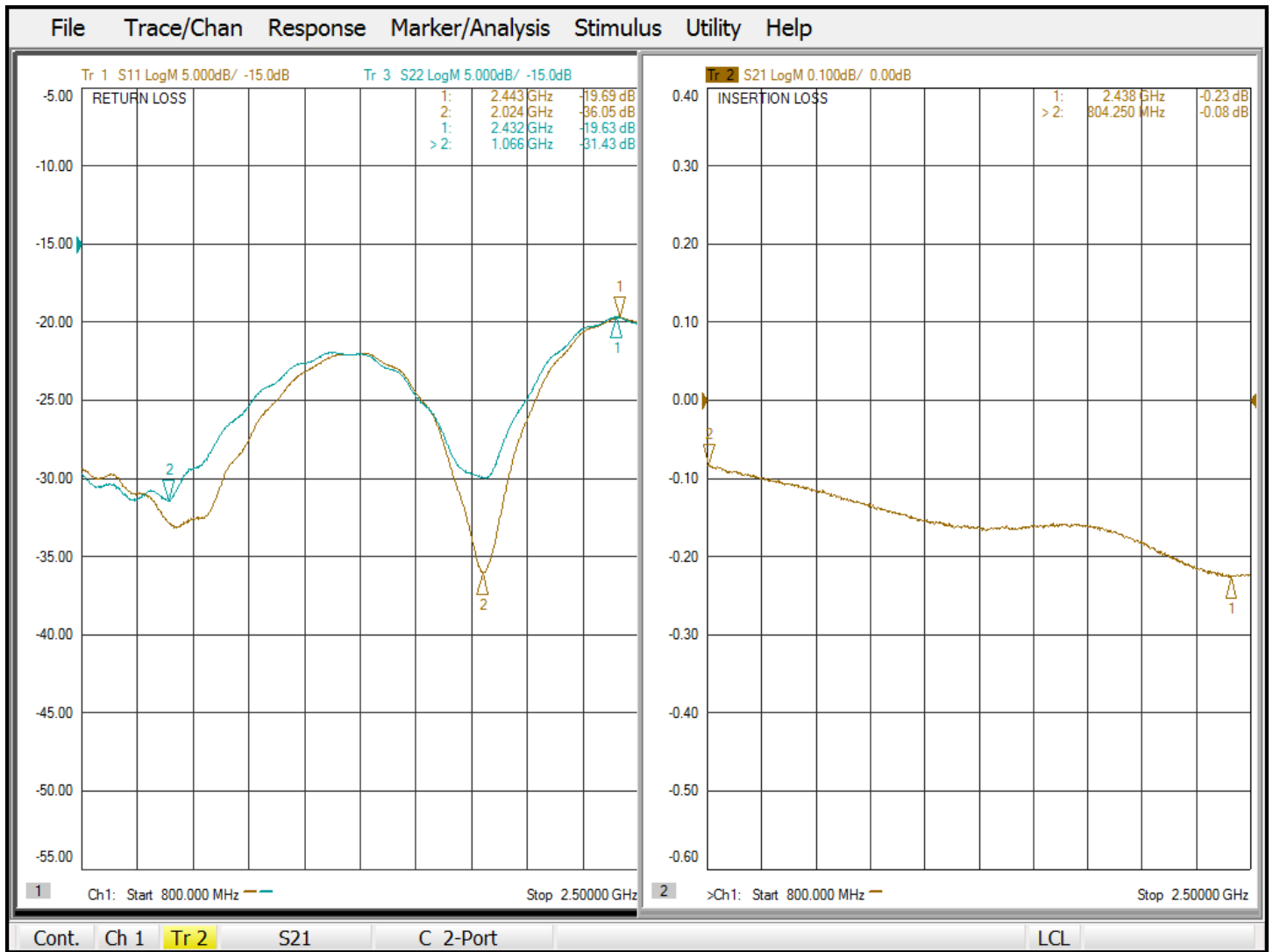
**TYPICAL CHARACTERISTICS  
ON  
PDC-800M2D5G-30C-NFF-60W**

<b>TEST. ITEM NO</b>	<b>PARAMETERS</b>	<b>SPECIFIED VALUE</b>	<b>TEST RESULTS</b>	<b>QA QC</b>
1	Frequency Range	0.8 TO 2.5 GHz	<b>0.8 TO 2.5 GHz</b>	
2	Insertion Loss	≤0.4 dB (Excluding Coupled Power)	<b>0.23 dB (See Plot)</b>	
3	VSWR	≤1.25:1	<b>1.23:1 (See Plot)</b>	
4	Directivity	20 dB Minimum	<b>25.17 dB (See Plot)</b>	
5	Coupling	30±1.0 dB Maximum	<b>30 ±0.55 dB (See Plot)</b>	
6	Frequency Sensitivity	≤±0.7 dB	<b>±0.49 dB (See Plot)</b>	
7	Power Handling	Average ≤60 W Peak ≤1 kW	<b>Average ≤60 W Peak ≤1 kW</b>	
8	Impedance	50 Ω	<b>50 Ω</b>	



# TYPICAL CHARACTERISTICS ON PDC-800M2D5G-30C-NFF-60W

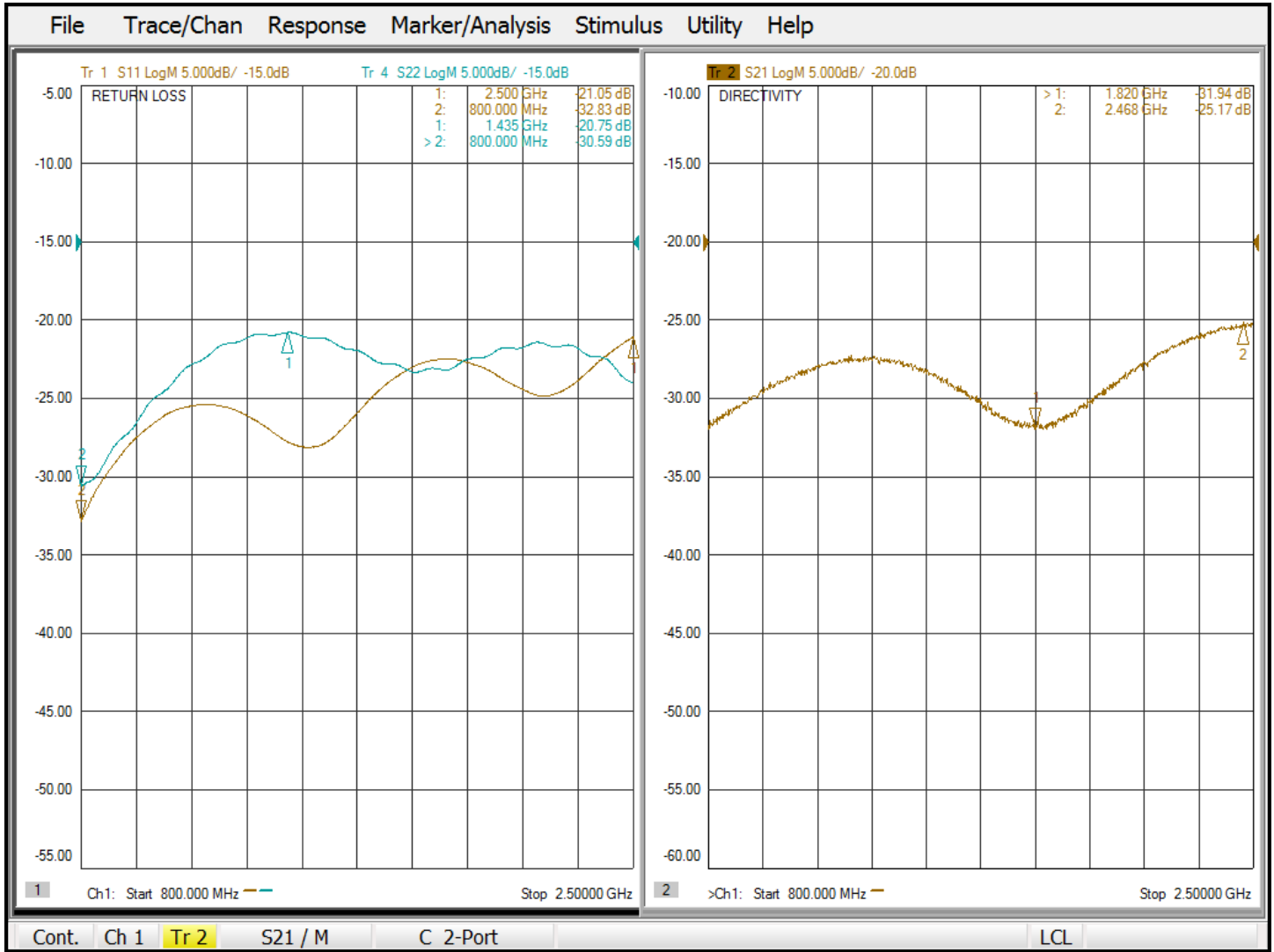
## Insertion Loss and Return Loss





**TYPICAL CHARACTERISTICS  
ON  
PDC-800M2D5G-30C-NFF-60W**

Directivity





# TYPICAL CHARACTERISTICS ON PDC-800M2D5G-30C-NFF-60W

## Coupling and Frequency Sensitivity

