



## Typical Characteristics ON PDC-2G18G-20C-SFF-50W

PMI MODEL NO. PDC-2G18G-20C-SFF-50W IS A DIRECTIONAL COUPLER THAT OPERATES OVER THE FREQUENCY RANGE OF 2.0 TO 18.0 GHz. IT HAS A COUPLING FACTOR OF  $20 \pm 0.7$  dB MAXIMUM AND COUPLING SENSITIVITY OF  $\pm 0.7$  dB MAXIMUM. THIS MODEL IS OUTFITTED WITH SMA FEMALE CONNECTORS.



July 21, 2021

Designed By:

Engineering - PMI

Tested and Reported By:

Tin Lay



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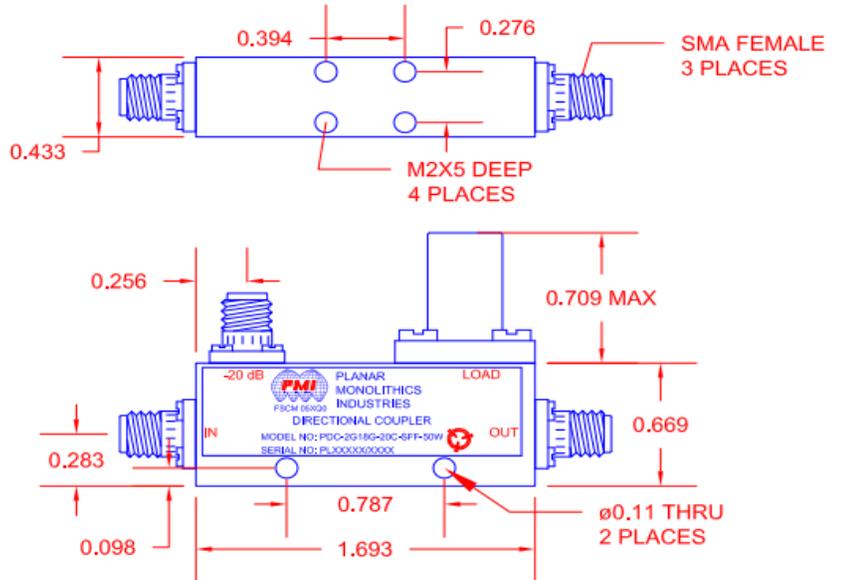
## Product Feature

### DESCRIPTION

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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	1/7/2019	

### MECHANICAL OUTLINE



### SPECIFICATIONS

- FREQUENCY RANGE: ----- 2.0 TO 18.0 GHz
- INSERTION LOSS: ----- 0.7 dB MAXIMUM (EXCLUDING COUPLING LOSS 0.04 dB)
- COUPLING FACTOR: -----  $20 \pm 0.7$  dB MAXIMUM
- COUPLING SENSITIVITY: -----  $\pm 0.7$  dB MAXIMUM
- DIRECTIVITY: ----- 15 dB MINIMUM
- VSWR: ----- PRIMARY: 1.40:1 MAXIMUM  
SECONDARY: 1.40:1 MAXIMUM
- POWER HANDLING: ----- INCIDENT: 50 WATTS MAXIMUM  
REFLECTED: 2 WATTS MAXIMUM
- IMPEDANCE: ----- 50 OHMS
- CONNECTORS: ----- SMA FEMALE
- FINISH: ----- PAINTED BLUE

### ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -55 °C TO +85 °C (OPERATING)  
-65 °C TO +125 °C (STORAGE)
- HUMIDITY: ----- UP TO 95%, NON-CONDENSING (OPERATING)
- SHOCK: ----- MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: ----- MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: ----- MIL-STD-202, METHOD 107D COND. A

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

**PMI CONFIDENTIAL AND PROPRIETARY**

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

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN	GW	1/7/19	PRODUCT FEATURE PDC-2G18G-20C-SFF-50W			
REDRAWN			SIZE	PSOM/NA	DWG NO.	REV.
ISSUED			A	05XQ0	PRELIMINARY	-
			SCALE	N:S	SHEET	1 OF 1



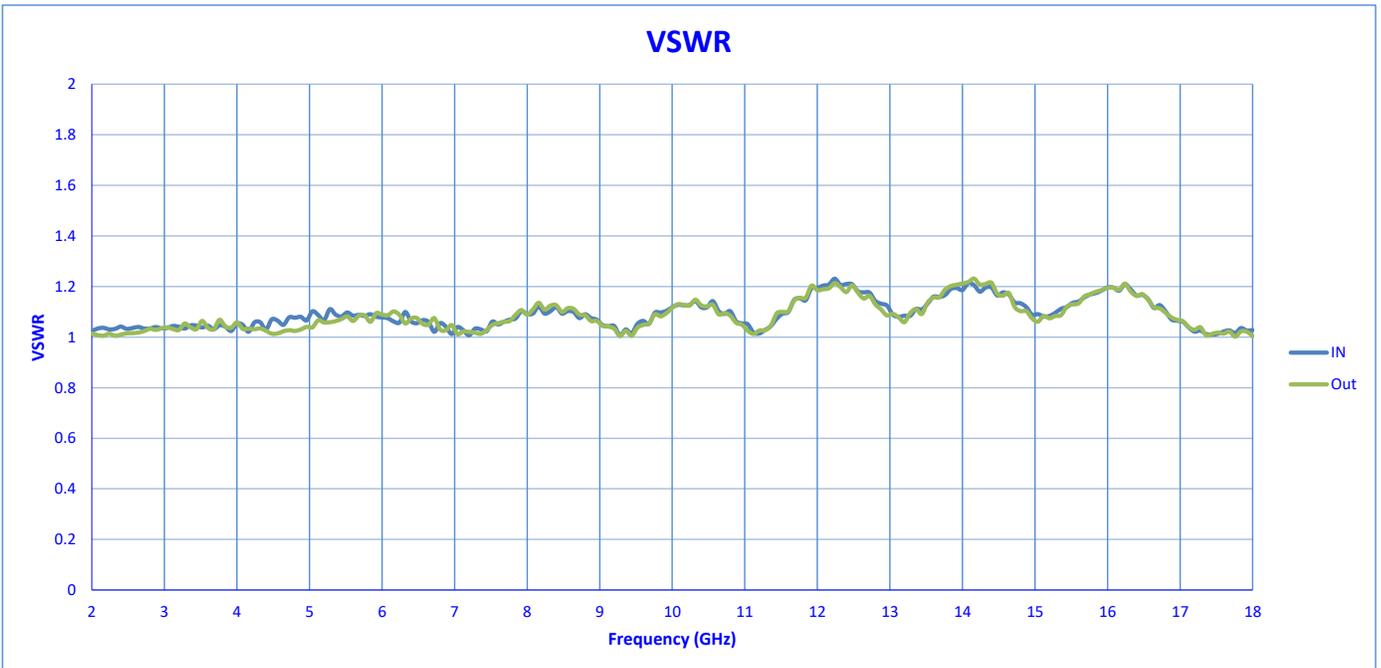
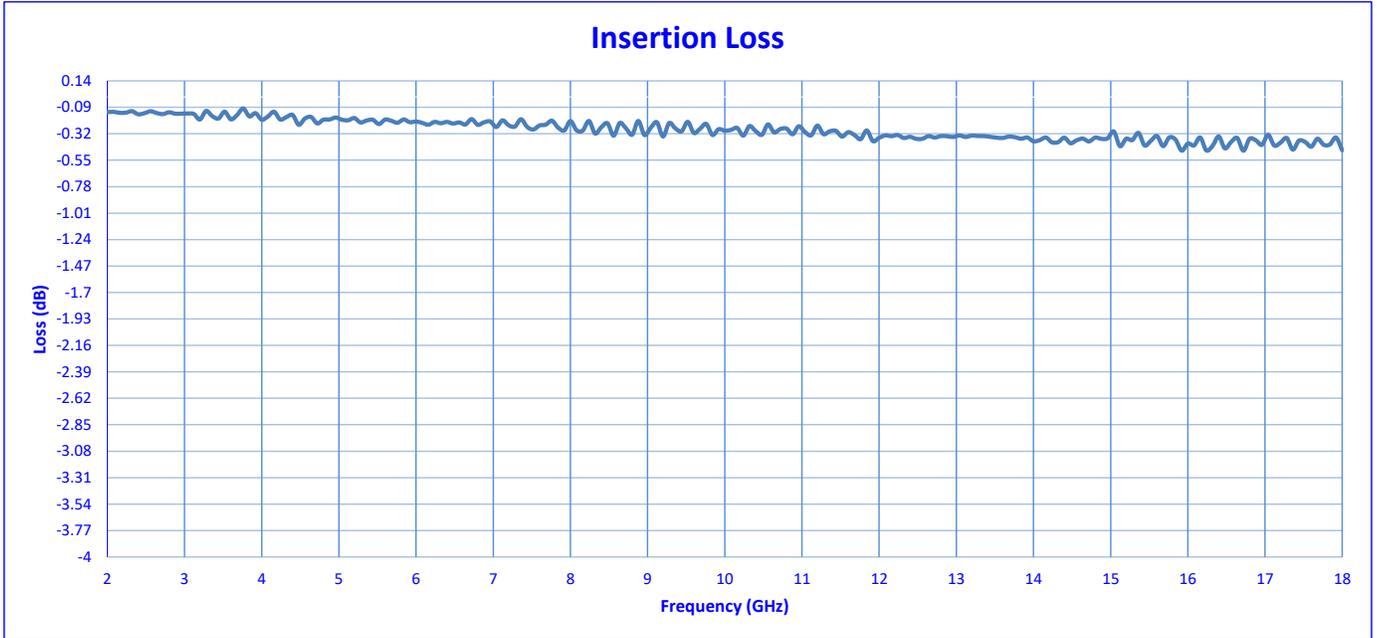
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## Technical Specifications

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	2.0 to 18 GHz	2.0 to 18 GHz	
2	Insertion Loss (Excluding coupling loss 0.04 dB)	0.7 dB MAX.	0.47 dB (See Plot)	
3	VSWR:	Primary: 1.40:1 MAX Secondary: 1.40:1 MAX	1.23:1 (See Plot)	
4	Directivity:	15 dB MIN.	16.6 dB See Plot	
5	Coupling:	$20 \pm 0.7$ dB MAX.	$20 \pm 0.56$ dB See Plot	
6	Frequency Sensitivity:	$\leq \pm 0.7$ dB Over Frequency	+0.33 dB (See Plot)	
7	Power Handling:	Incident: 50 Watts MAX Reflected: 2 Watts MAX	Pass Incident 50 Watts Reflected 2 Watts	
8	Impedance:	50 $\Omega$	50 $\Omega$	



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