

PMI MODEL PDC-100M500M-40C-NFF-500W IS A 100MHz TO 500MHz DIRECTIONAL COUPLER HAVING A 40DB COUPLING FACTOR AND > 20DB DIRECTIVITY. THIS MODEL HANDLES AN INPUT POWER OF 500 WATTS CW.



Reported By: Matt Laulis  
Date: 2/13/2024

TYPICAL CHARACTERISTICS  
ON  
PDC-100M500M-40C-NCC-500W

PRODUCT FEATURE

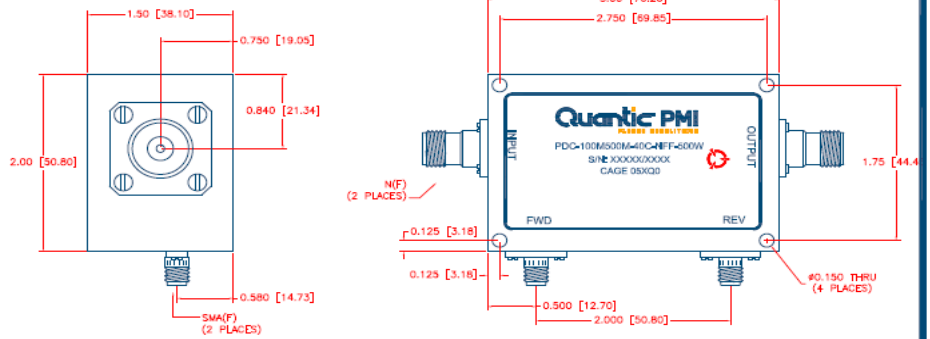
**DESCRIPTION**

PMI MODEL PDC-100M500M-40C-NFF-500W IS A 100MHZ TO 500MHZ DIRECTIONAL COUPLER HAVING A 40DB COUPLING FACTOR AND > 20DB DIRECTIVITY. THIS MODEL HANDLES AN INPUT POWER OF 500 WATTS CW.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	11/09/23	

**SPECIFICATIONS**

- FREQUENCY RANGE: ——— 100 TO 500 MHz
- INSERTION LOSS: ——— 0.20 dB MAXIMUM
- VSWR: ——— 1.15:1 MAXIMUM
- DIRECTIVITY ——— 20dB MINIMUM
- COUPLING: ——— 40 dB ±1 dB
- COUPLING FLATNESS: ——— ±0.50 dB MAXIMUM
- POWER HANDLING: ——— 500 WATTS MAXIMUM
- IMPEDANCE: ——— 50Ω
- CONNECTORS: ——— N(F) - RF INPUT & OUTPUT  
————— SMA(F) - FWD & REV
- FINISH: ——— PAINTED BLUE



PMI CONFIDENTIAL AND PROPRIETARY

**ENVIRONMENTAL RATINGS:**

- TEMPERATURE: ——— -25°C TO +85°C (OPERATING)  
————— -55°C TO +150°C (STORAGE)

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

7309-A GROVE ROAD  
FREDERICK, MARYLAND 21704 USA  
TEL: (301)-662-5019, FAX: (301)-662-1731  
WEB: www.quanticmpi.com  
EMAIL: sales@quanticmpi.com  
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			REV.
DRAWN <i>M.D.L.</i>		11/09/23	OUTLINE PDC-100M500M-40C-NFF-500W			
REDRAWN			SIZE	PSOM NO.	DWG NO.	
ISSUED			A	05XQ0	27047640	A1
			SCALE	N:S		SHEET 1 OF 1

**TYPICAL CHARACTERISTICS  
ON  
PDC-100M500M-40C-NCC-500W**

**TEST DATA**

TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			25°C	-25°C	85°C
1	Frequency Range	0.1 GHz to 0.5 GHz	0.1 GHz to 0.5 GHz	0.1 GHz to 0.5 GHz	0.1 GHz to 0.5 GHz
2	Insertion Loss	0.2 dB Max. 0.15 dB Typ.	0.14 dB	0.14 dB	0.14 dB
3	VSWR	1.5:1 Max.	1.15:1	1.15:1	1.15:1
4	Directivity	20 dB Min.	32.43 dB	33.47 dB	32.49 dB
5	Coupling	40 dB ± 1 dB	40.1 dB to 40.3 dB	40 dB to 40.5 dB	40 dB to 40.4 dB
6	Coupling Flatness	±0.5 dB	± 0.1 dB	± 0.2 dB	± 0.2 dB
7	Operating Power CW	200 Watts	Pass By Design	Pass By Design	Pass By Design

