



## TYPICAL CHARACTERISTICS ON 11BP2280-142D2-CD-SFF

PMI MODEL: 11BP2280-142D2-CD-SFF IS A BAND PASS FILTER WITH A CENTER FREQUENCY OF 2280 MHz AND A NOMINAL BANDWIDTH OF 142.2 MHz. THIS UNIT HAS A TYPICAL INSERTION LOSS OF 3.5 dB INSIDE THE SMALL 2.00" x 0.50" x 0.50" PACKAGE OUTFITTED WITH SMA FEMALE CONNECTORS.



August 18, 2021

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# TYPICAL CHARACTERISTICS ON 11BP2280-142D2-CD-SFF

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# TYPICAL CHARACTERISTICS ON 11BP2280-142D2-CD-SFF

## OUTLINE DRAWING

### DESCRIPTION

PMI MODEL: 11BP2280-142D2-CD-SFF IS A BAND PASS FILTER WITH A CENTER FREQUENCY OF 2280 MHz AND A NOMINAL BANDWIDTH OF 142.2 MHz. THIS UNIT HAS A TYPICAL INSERTION LOSS OF 3.5 dB INSIDE THE SMALL 2.00" x 0.50" x 0.50" PACKAGE OUTFITTED WITH SMA FEMALE CONNECTORS.

### SPECIFICATIONS

- CENTER FREQUENCY: ----- 2280 MHz NOMINAL
- 3 dB BANDWIDTH: ----- 142.2 MHz NOMINAL
- PASSBAND INSERTION LOSS: ----- 3.5 dB TYPICAL  
10.0 dB MAXIMUM
- PASSBAND VSWR: ----- 1.5:1 MAXIMUM
- STOPBAND ATTENUATION: ----- 70 dB MINIMUM @ 2160 MHz  
70 dB MINIMUM @ 2400 MHz
- POWER HANDLING: ----- +30 dBm MAXIMUM
- IMPEDANCE: ----- 50 Ω
- CONNECTORS: ----- SMA FEMALE
- SIZE: ----- 2.00" x 0.50" x 0.50"  
50.80 mm x 12.70 mm x 12.70 mm
- SURFACE FINISH: ----- BLUE EPOXY POLIMIDE COATING IAW  
MIL-C-22750, TYPE I OVER EPOXY  
POLIMIDE PRIMER IAW MIL-P-23377,  
TYPE I, CLASS 1 OR 3.

### ENVIRONMENTAL RATINGS

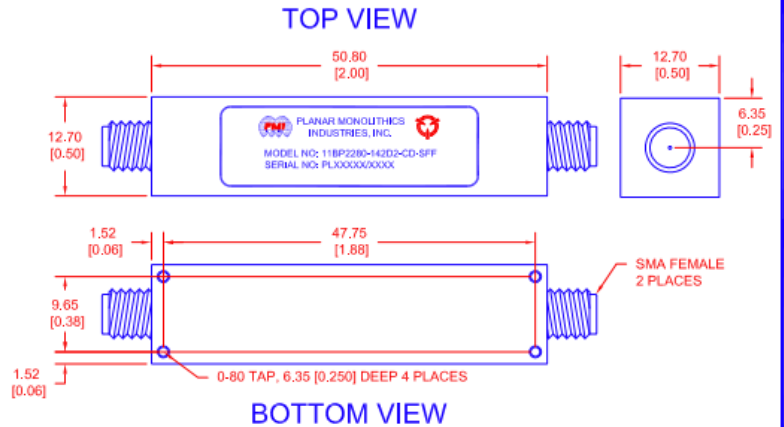
- TEMPERATURE: ----- -0 °C TO +50 °C (OPERATING)
- HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B
- SHOCK: ----- MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: ----- MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: ----- MIL-STD-202, METHOD 107D COND. A

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

ALL DIMENSIONS ARE IN mm [INCH]  
TOLERANCES:  
X.XX ±0.508 [0.020]  
X.XXX ±0.254 [0.010]

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	05/24/21	
	A2	ECN # 21-0139	08/25/21	

### MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		REV.
DRAWN: <i>M. Berry</i>		08/11/18	PRODUCT FEATURE		A2
CHECKED:			11BP2280-142D2-CD-SFF		
DESIGNED:	SCALE: N:S		FIG. NO. A	FSM NO. 05XQ0	DWG NO. 27042140
			SHEET 1 OF 1		



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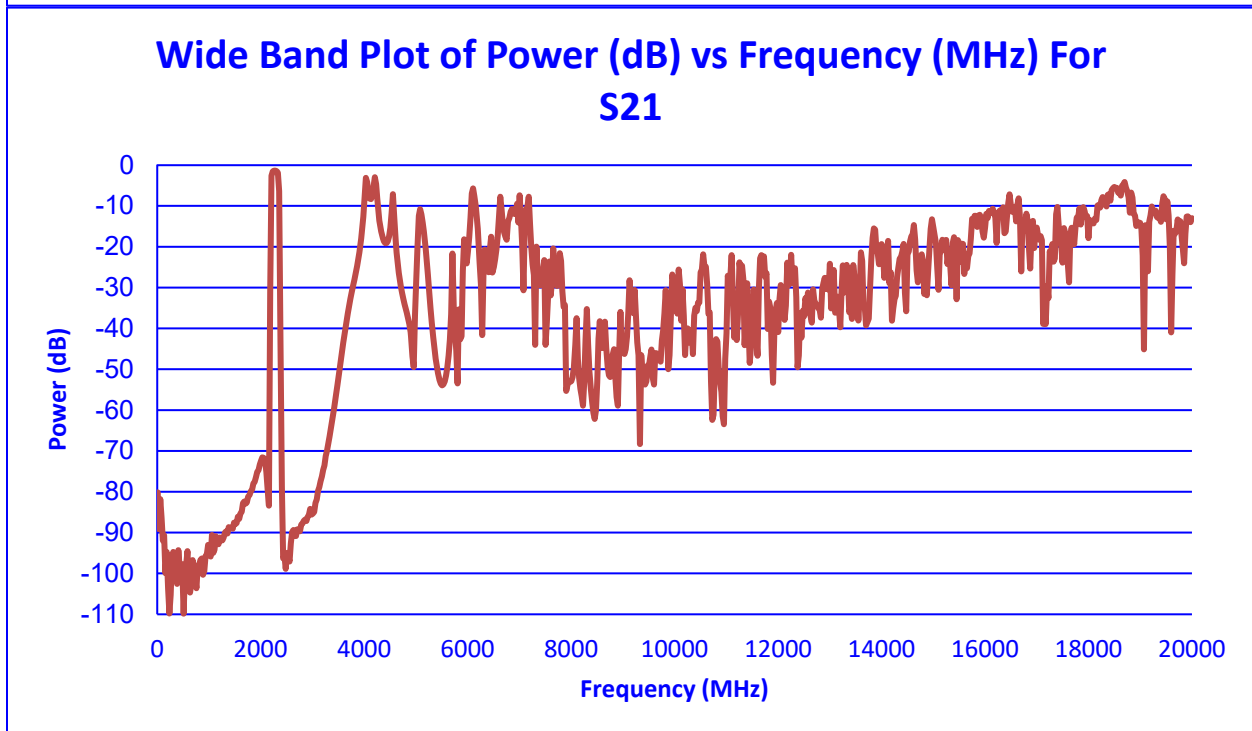
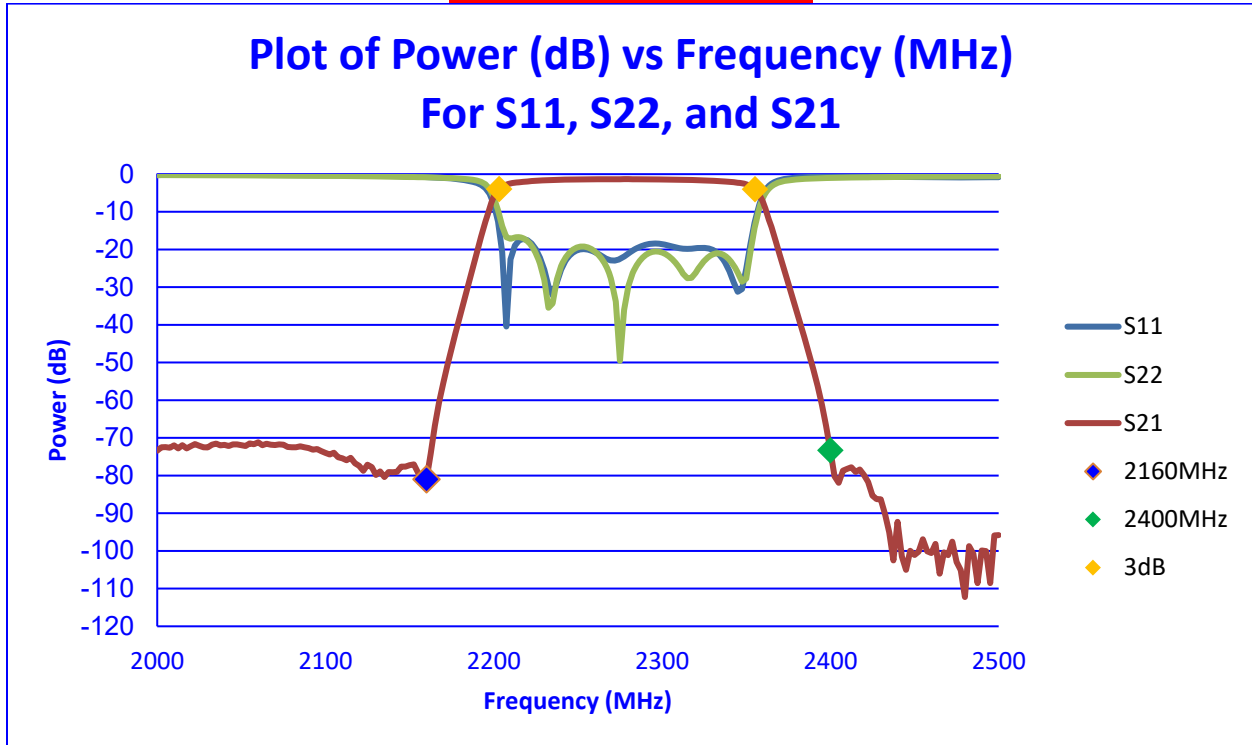
## TEST DATA SUMMARY AT 25°C

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	Test Results	QA QC
1	Center Frequency:	2280 MHz NOMINAL	<b>2272 MHz</b>	
2	3 dB Bandwidth:	142.2 MHz NOMINAL	<b>152 MHz</b>	
3	Passband Insertion Loss:	3.5 dB TYP. 10.0 dB Max.	<b>4.33 dB</b>	
4	Passband VSWR:	1.5:1 Max.	<b>1.34:1</b>	
5	Stopband Attenuation:	70 dB Min @ 2160 MHz 70 dB Min @ 2400 MHz	<b>81 dB</b> <b>73.3 dB</b>	
6	Power Handling:	+30 dBm Max.	<b>+30 dBm Max.</b>	
7	Impedance:	50Ω	<b>50Ω</b>	



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TEST DATA AT 25°C





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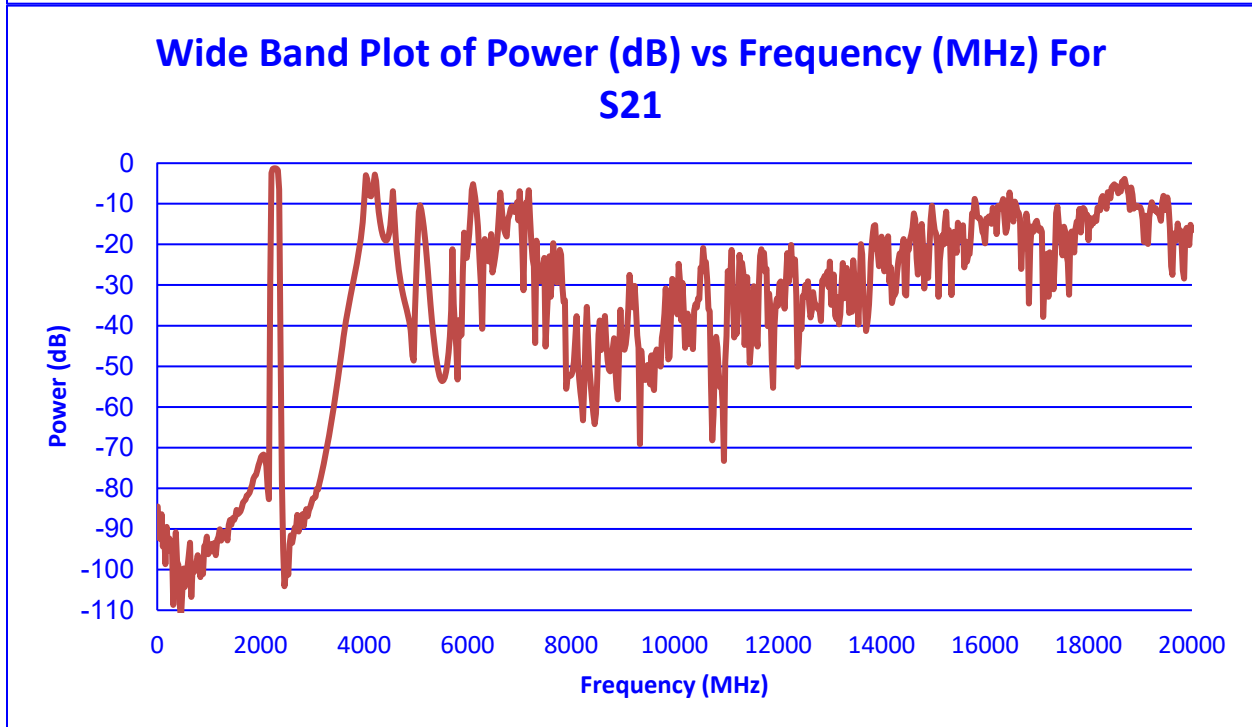
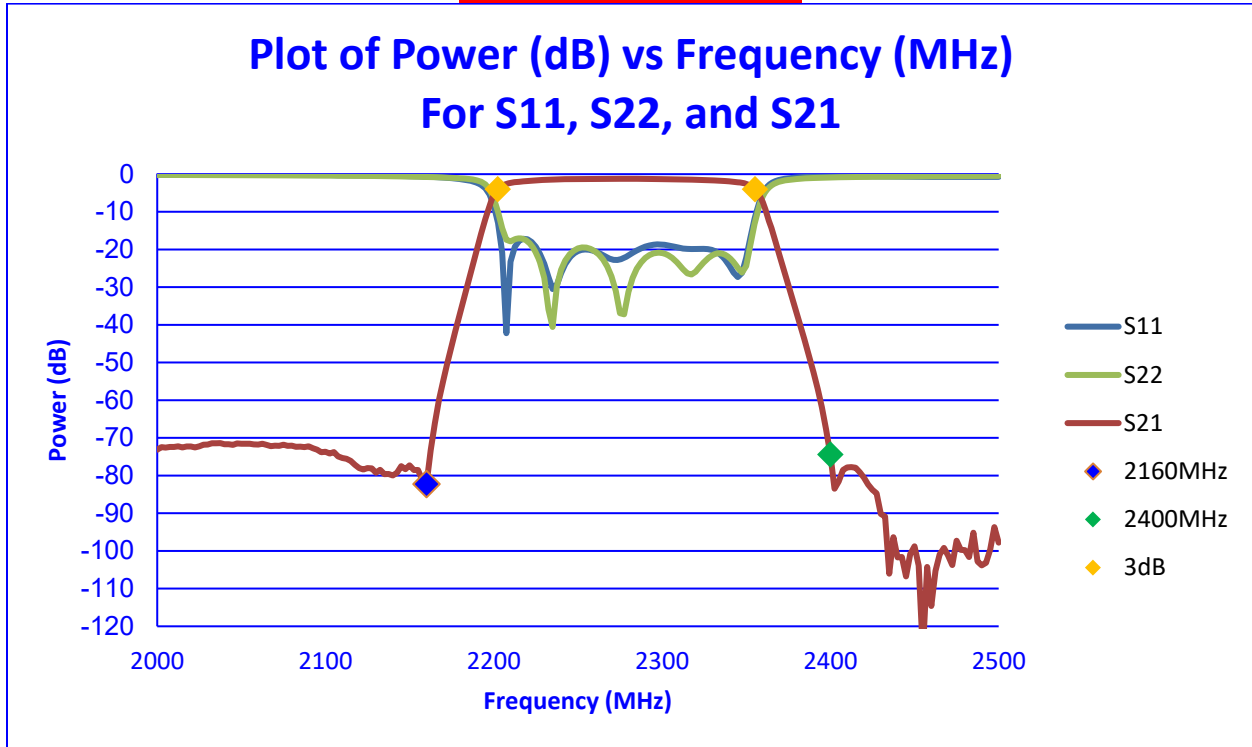
## TEST DATA SUMMARY AT 0°C

<b>TEST ITEM NO</b>	<b>PARAMETERS</b>	<b>SPECIFIED VALUE</b>	<b>Test Results</b>	<b>QA QC</b>
1	Center Frequency:	2280 MHz NOMINAL	2274 MHz	
2	3 dB Bandwidth:	142.2 MHz NOMINAL	152.8 MHz	
3	Passband Insertion Loss:	3.5 dB TYP. 10.0 dB Max.	4.24 dB	
4	Passband VSWR:	1.5:1 Max.	1.33:1	
5	Stopband Attenuation:	70 dB Min @ 2160 MHz 70 dB Min @ 2400 MHz	82.2 dB 74.4 dB	
6	Power Handling:	+30 dBm Max.	+30 dBm Max.	
7	Impedance:	50Ω	50Ω	



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TEST DATA AT 0°C





# TYPICAL CHARACTERISTICS ON 11BP2280-142D2-CD-SFF

## TEST DATA SUMMARY AT 50°C

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	Test Results	QA QC
1	Center Frequency:	2280 MHz NOMINAL	<b>2272 MHz</b>	
2	3 dB Bandwidth:	142.2 MHz NOMINAL	<b>152 MHz</b>	
3	Passband Insertion Loss:	3.5 dB TYP. 10.0 dB Max.	<b>4.4 dB</b>	
4	Passband VSWR:	1.5:1 Max.	<b>1.36:1</b>	
5	Stopband Attenuation:	70 dB Min @ 2160 MHz 70 dB Min @ 2400 MHz	<b>81.9 dB</b> <b>72.8 dB</b>	
6	Power Handling:	+30 dBm Max.	<b>+30 dBm Max.</b>	
7	Impedance:	50Ω	<b>50Ω</b>	





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TEST DATA AT 50°C

