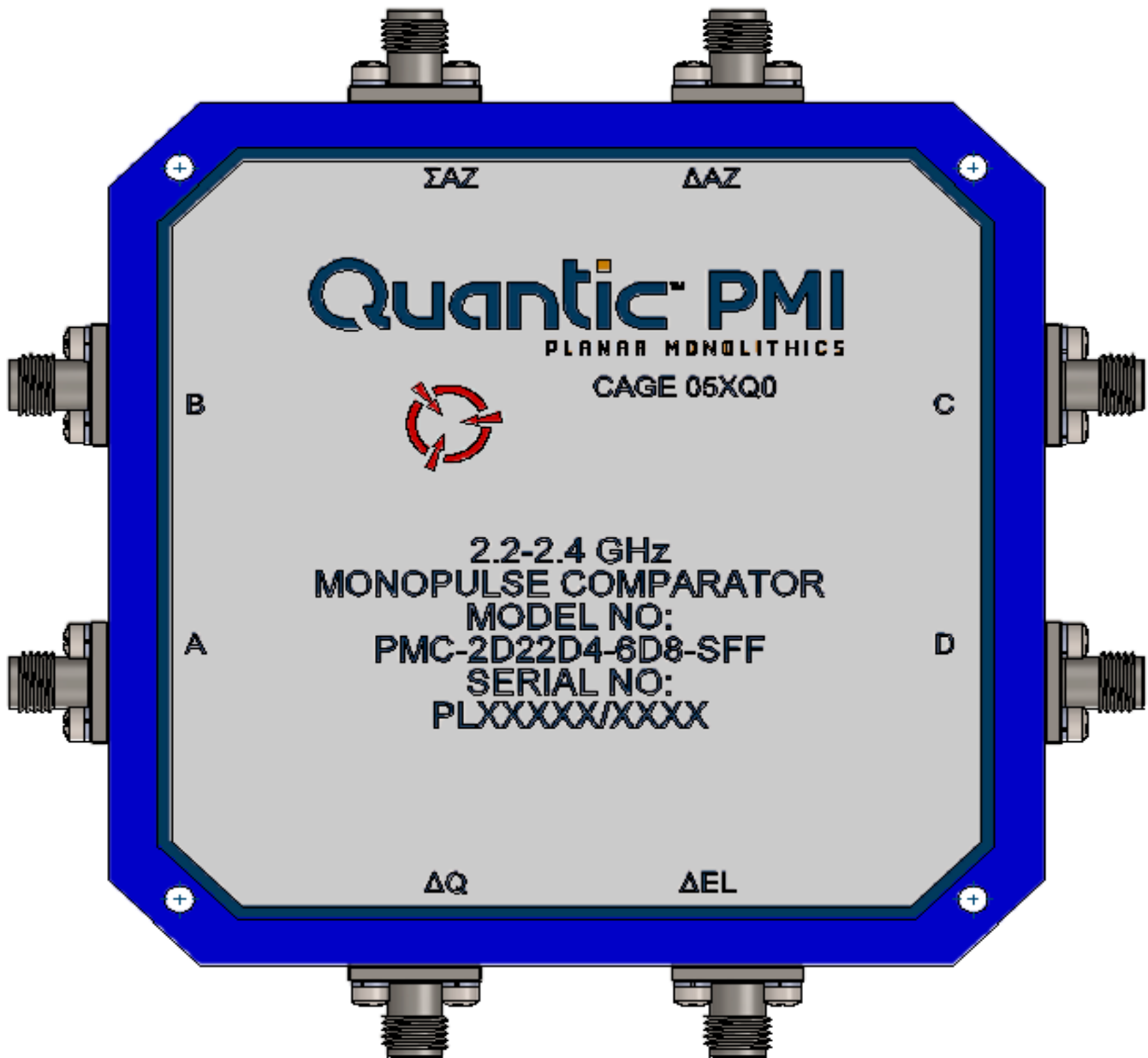


Typical Characteristics
On
PMC-2D22D4-6D8-SFF



Thursday, February 6, 2025

Reported By: D. Hoschar

Tested By: K. Craven

Typical Characteristics On PMC-2D22D4-6D8-SFF

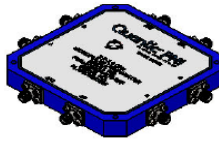
Outline Drawing:

DESCRIPTION:

PMI MODEL NO. PMC-2D22D4-6D8-SFF IS A MONOPULSE COMPARATOR THAT OPERATES OVER THE FREQUENCY RANGE OF 2.2 TO 2.4 GHz. IT HAS A MAXIMUM INSERTION LOSS OF 6.8 dB AND A MINIMUM ISOLATION OF 20 dB. THIS MODEL IS OUTFITTED WITH SMA FEMALE CONNECTORS.

SPECIFICATIONS:

- FREQUENCY RANGE: 2.2 - 2.4 GHz
- INSERTION LOSS: 6.8 dB MAX
- AMPLITUDE BALANCE: ±0.5 dB MAX
- PHASE BALANCE: ±5° MAX
- ISOLATION: 20 dB MIN
- VSWR: 1.3:1 TYP
1.5:1 MAX
- POWER HANDLING: Average 10 W MAX
Peak 0.1 kW MAX
- IMPEDANCE: 50 Ω
- CONNECTORS: SMA Female
- FINISH: Painted Blue



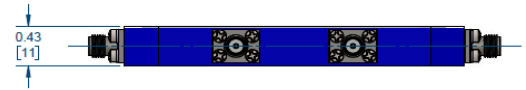
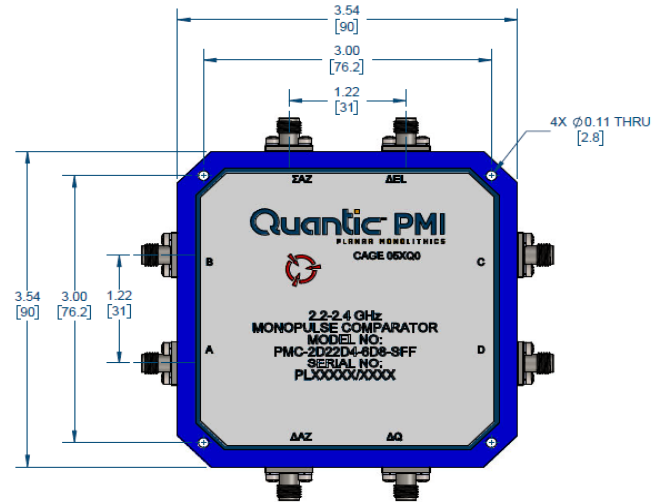
	ΣAZ	ΔEL	ΔAZ	ΔQ
Phase Offset for Input A	0	-90	180	90
Phase Offset for Input B	0	-90	0	-90
Phase Offset for Input C	0	90	180	-90
Phase Offset for Input D	0	90	0	90

ENVIRONMENTAL RATINGS:

- TEMPERATURE: -55°C - +85°C (OPERATING)
-65°C TO +125°C (STORAGE)
- OPERATING HUMIDITY: UP TO 90%, NON-CONDENSING
- 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

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	9/10/2004	



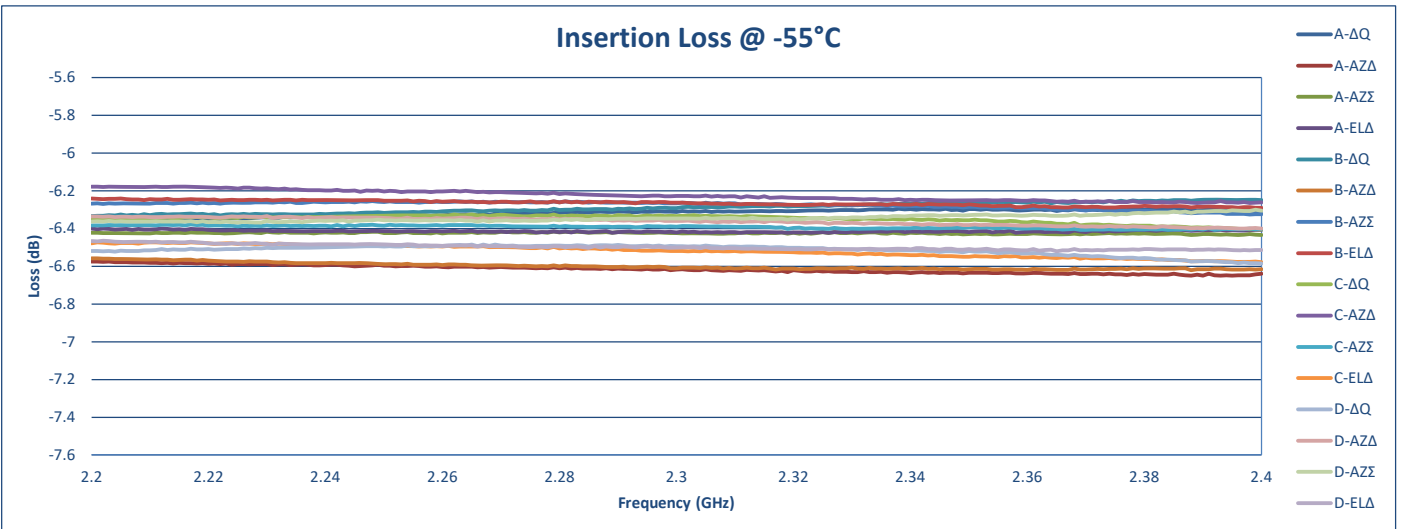
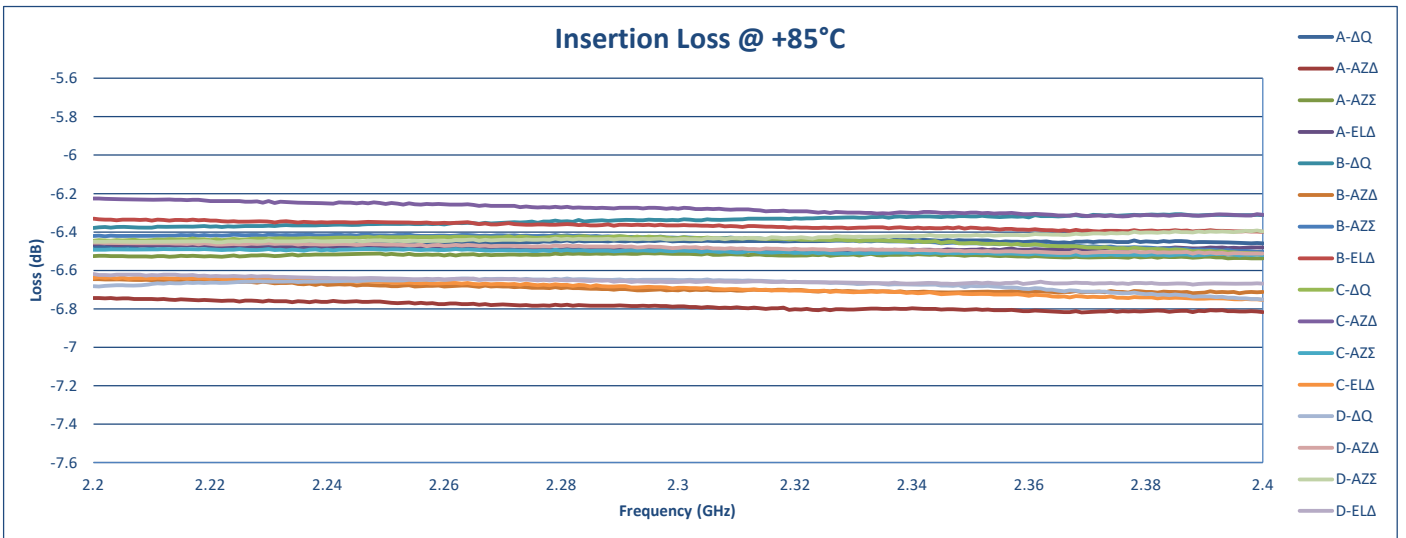
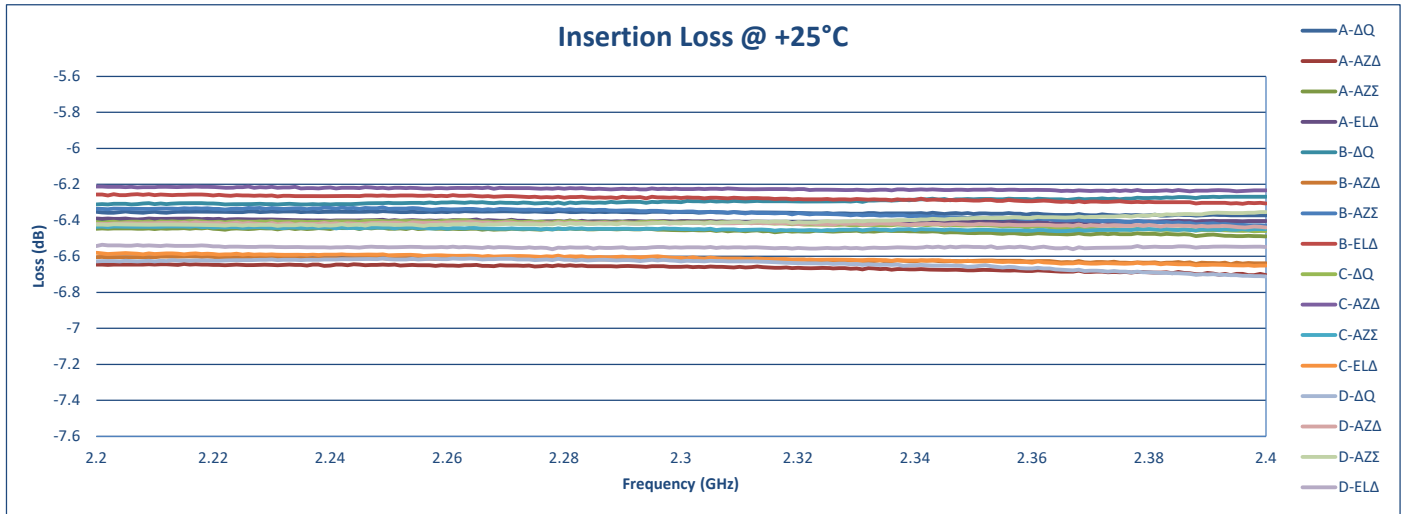
PMI CONFIDENTIAL AND PROPRIETARY

<small>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE ANGLES</small> <small>PLASTICS ARE DIMENSIONS ARE</small> <small>IN. 0.015</small> <small>MM 0.508</small>		<small>PART NO.</small> <small>APPROVALS</small> <small>DATE</small> <small>D. Hoschar</small> <small>9/10/2004</small>			
<small>MATERIAL:</small> <small>FINISH:</small>		<small>TITLE</small> Outline		<small>7309-A GROVE ROAD, FREDERICK, MD 21704 USA</small> <small>WWW.QUANTICPMI.COM</small> <small>TEL: (301) 662-5019</small> <small>FAX: (301) 662-1731</small>	
<small>NEXT ASSY</small> <small>USED ON</small> <small>APPLICATION</small>	<small>DRG NO.</small> B	<small>DWG NO.</small> 27048400	<small>SCALE</small> 1:1	<small>REV.</small> A1	PMC-2D22D4-6D8-SFF

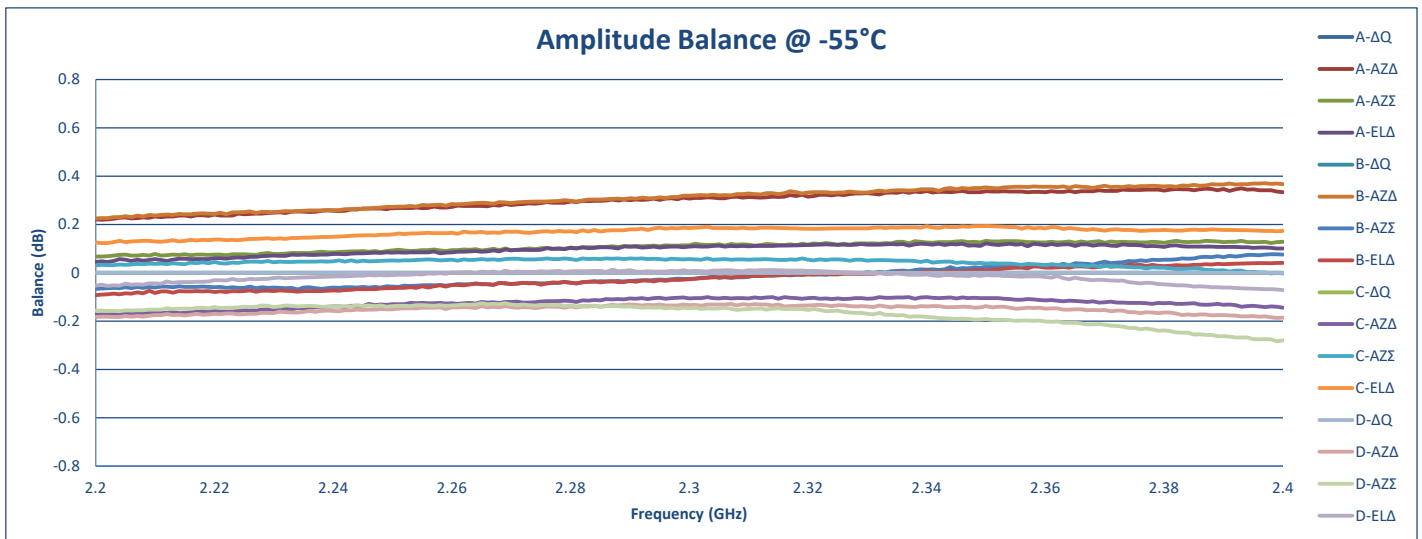
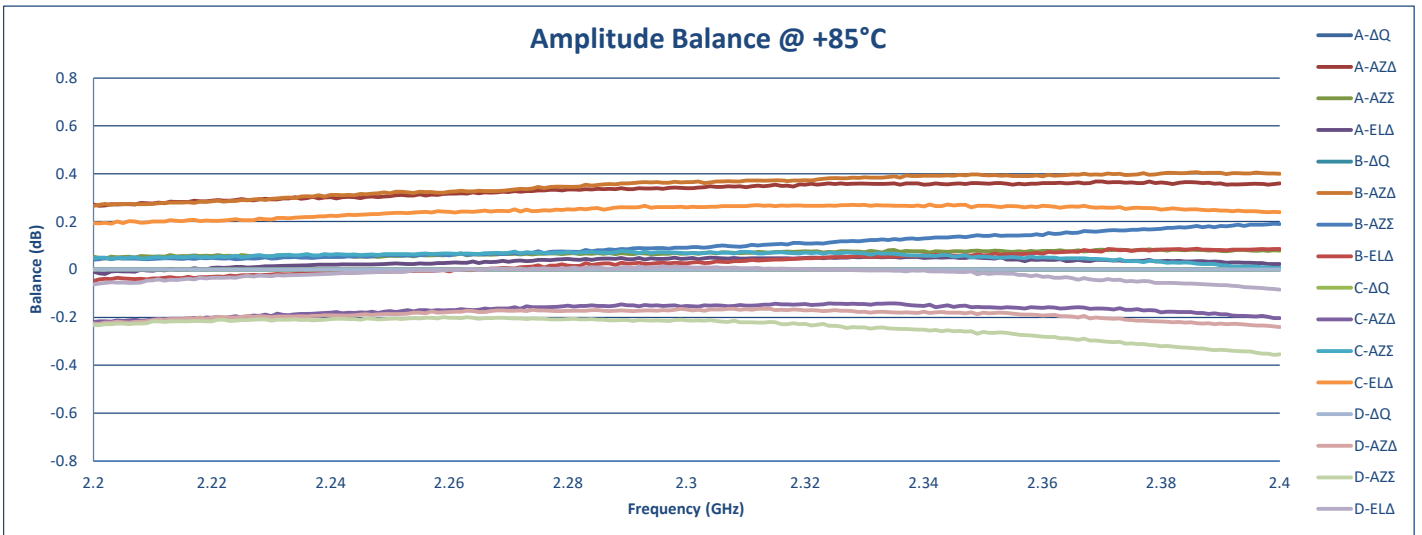
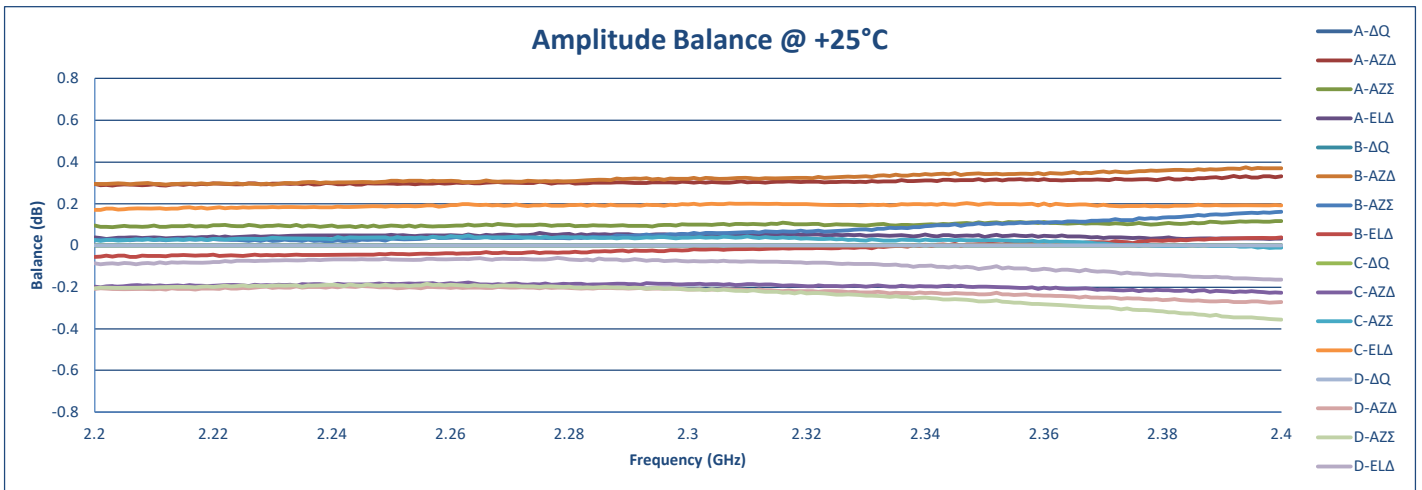
Typical Characteristics On PMC-2D22D4-6D8-SFF

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	Test Results			QA QC
			+25°C	+85°C	-55°C	
1	Frequency Range:	2.2 GHz to 2.4 GHz	2.2 GHz to 2.4 GHz	2.2 GHz to 2.4 GHz	2.2 GHz to 2.4 GHz	
2	Insertion Loss:	6.8 dB Max.	6.7 dB See Graph	6.8 dB See Graph	6.7 dB See Graph	
3	Amplitude Balance:	±0.5 dB Max.	+0.37 dB -0.36 dB See Graph	+0.41 dB -0.36 dB See Graph	+0.37 dB -0.28 dB See Graph	
4	Phase Balance:	±5° Max.	±0.87°	±0.93°	±1.02°	
5	Isolation:	20 dB Min.	21 dB	22 dB	21 dB	
6	VSWR:	1.3:1 Typ. 1.5:1 Max.	1.29:1 See Graph	1.37:1 See Graph	1.37:1 See Graph	
7	Power Handling:	Average: 10 W Max. (Port A, B, C, & D) Peak: 0.1 kW Max.	10W MAX			

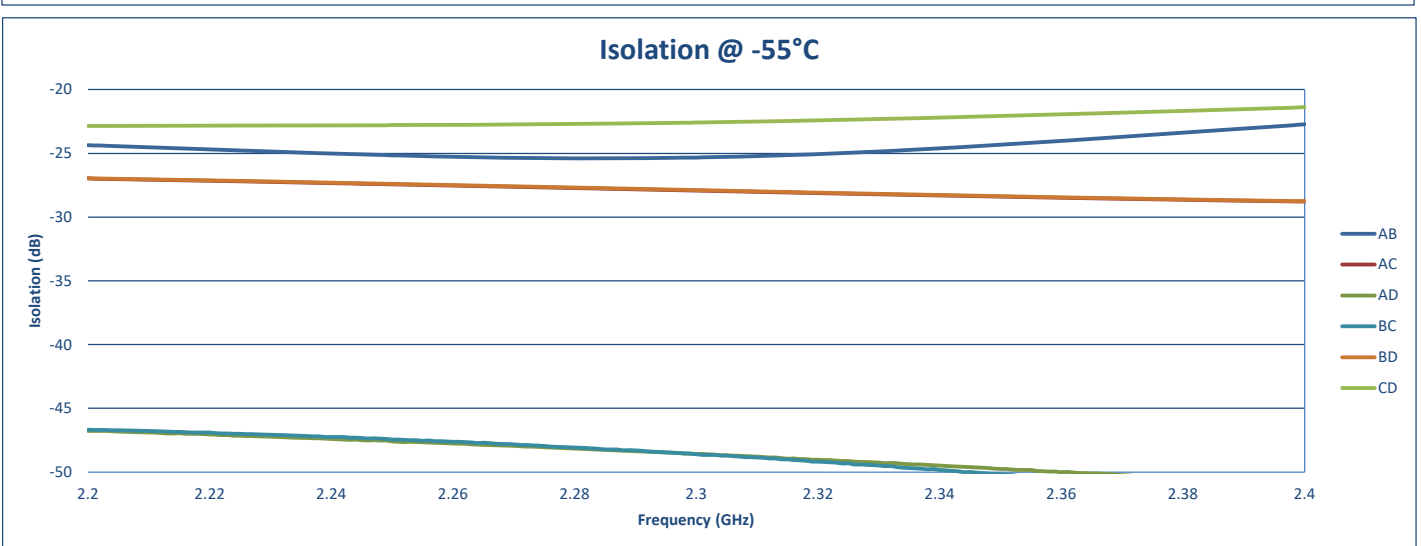
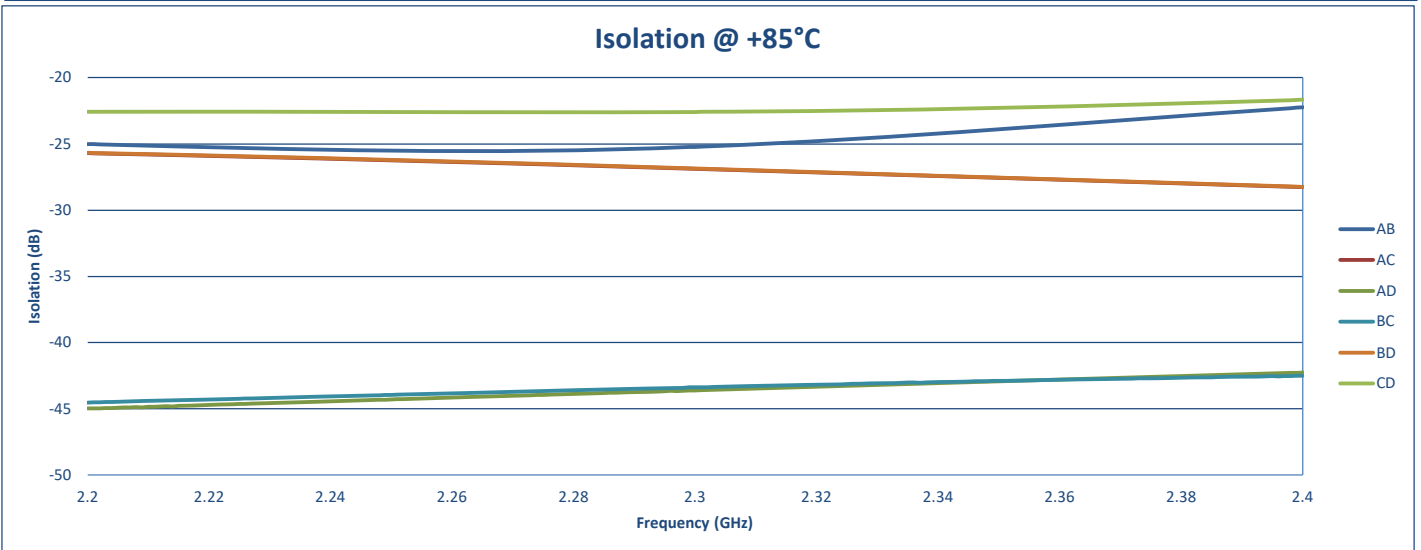
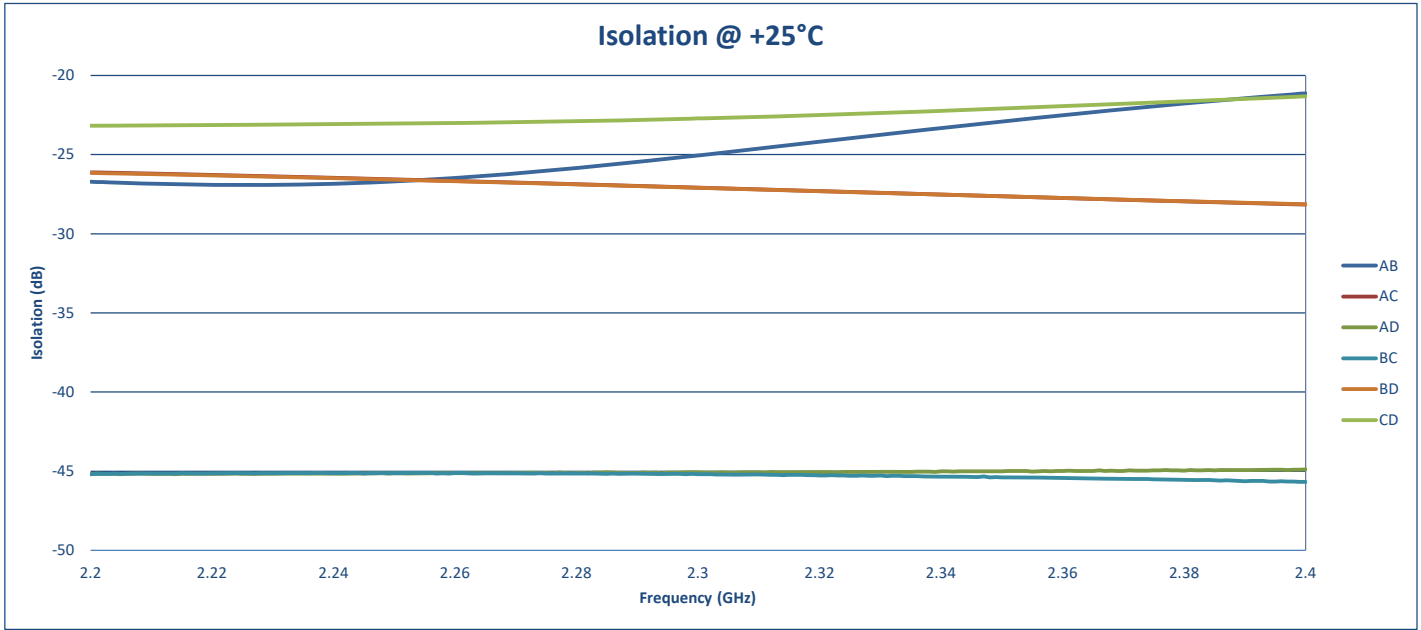
Typical Characteristics
On
PMC-2D22D4-6D8-SFF



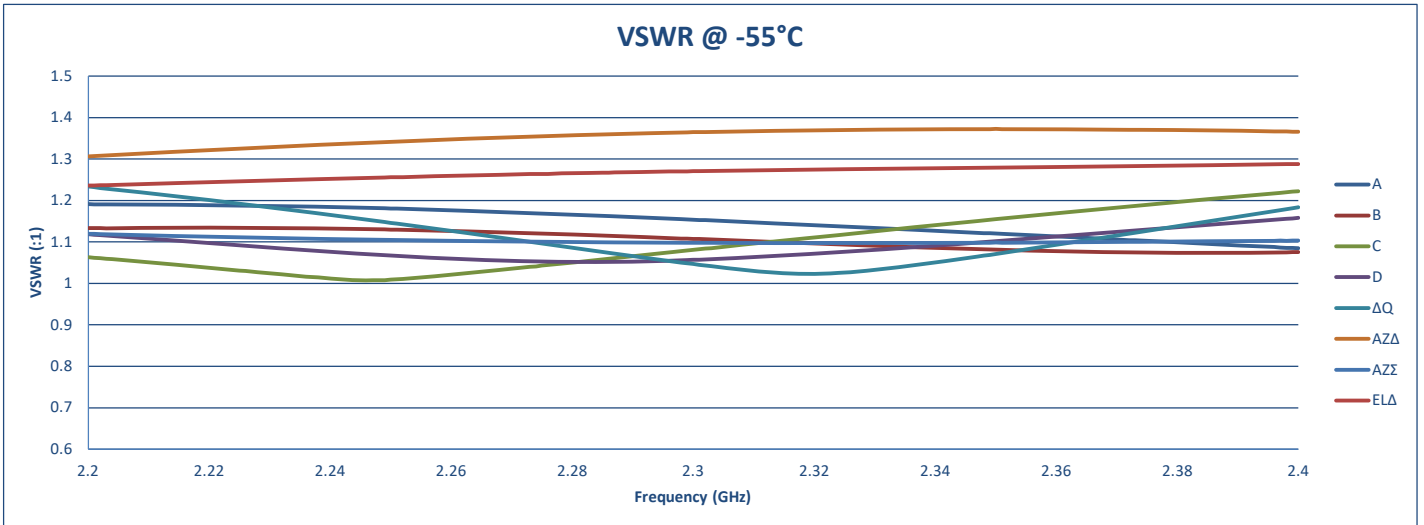
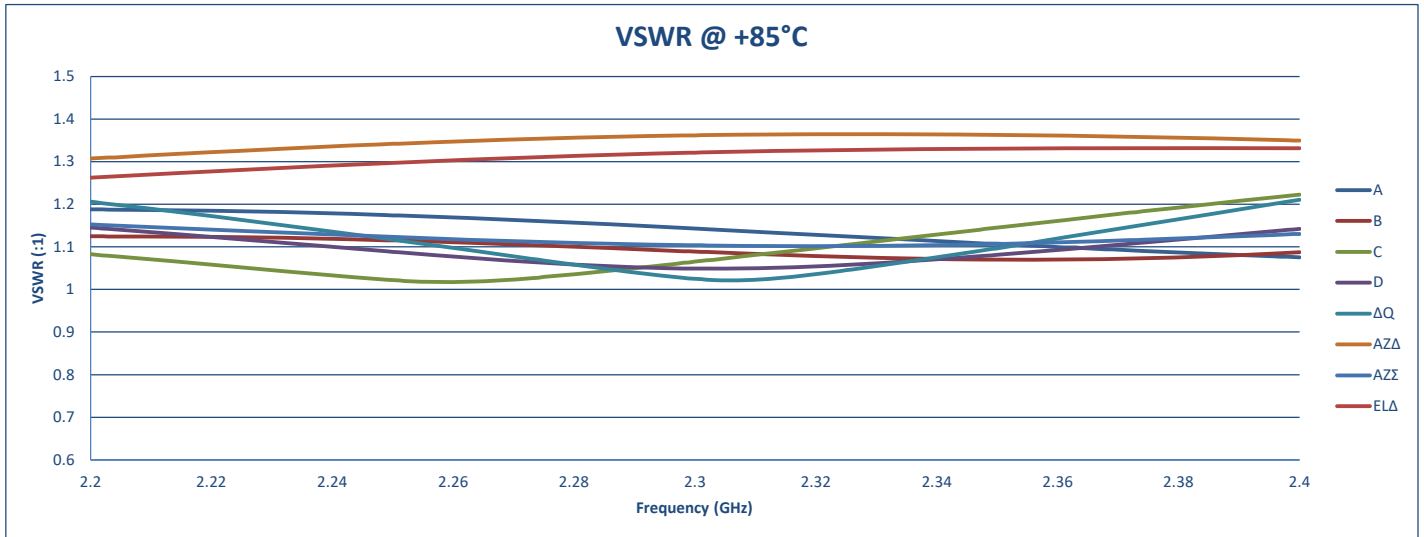
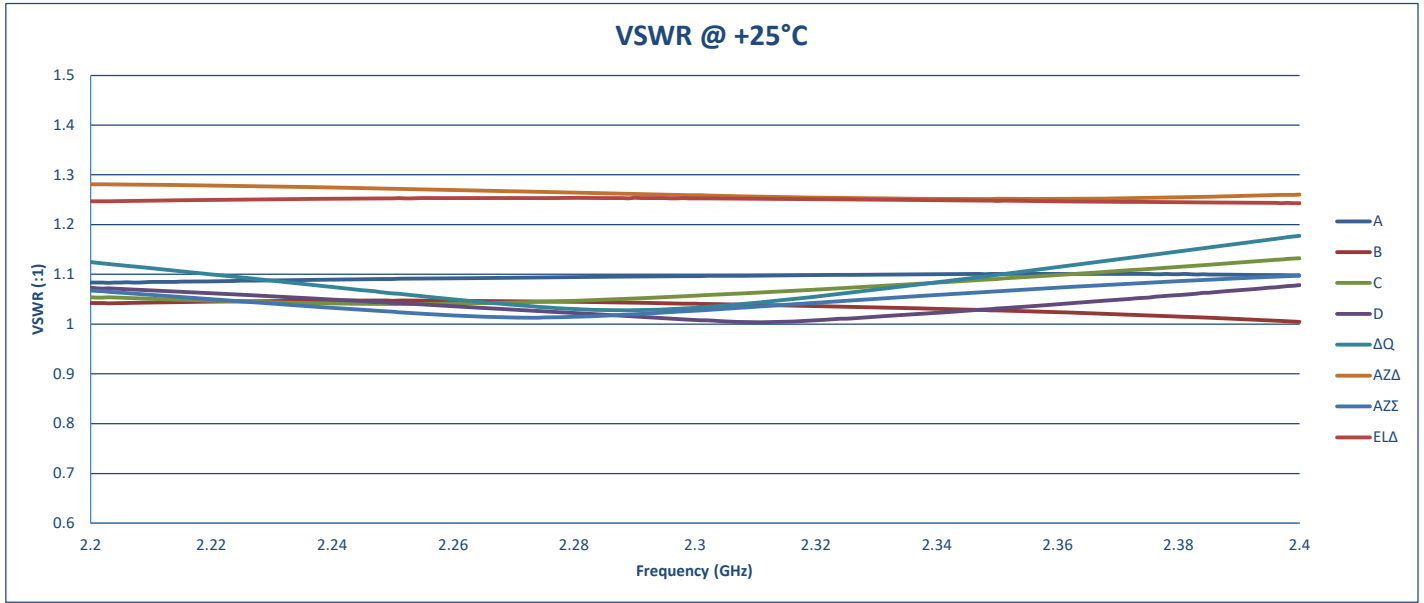
Typical Characteristics On PMC-2D22D4-6D8-SFF



**Typical Characteristics
 On
 PMC-2D22D4-6D8-SFF**



Typical Characteristics
 On
 PMC-2D22D4-6D8-SFF



Typical Characteristics On PMC-2D22D4-6D8-SFF

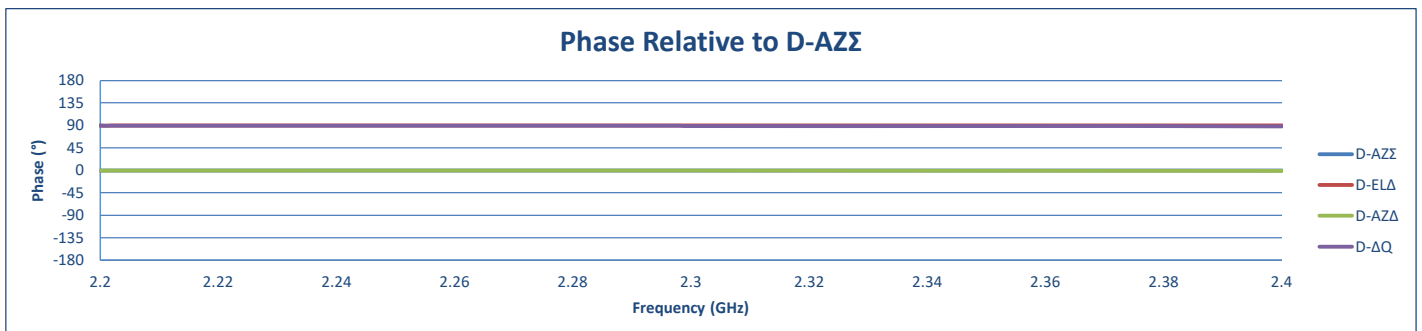
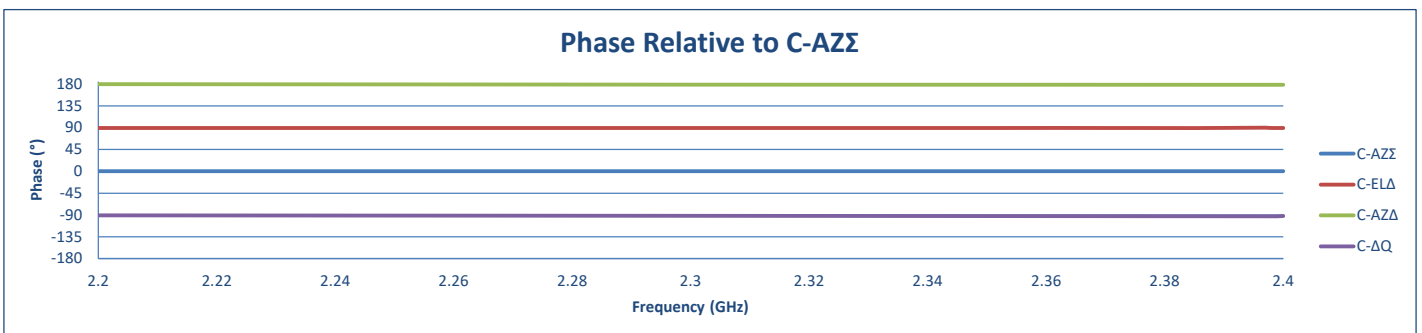
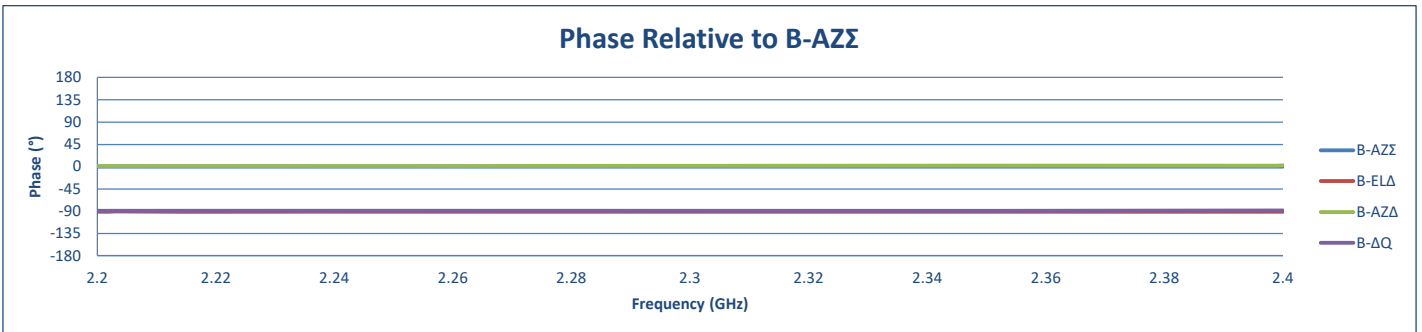
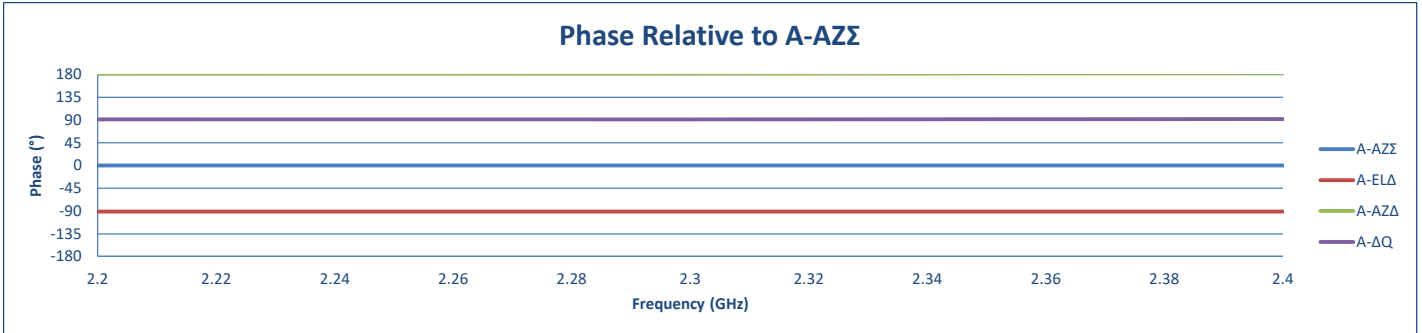
Phase Data Relative to AZΣ @ +25°C		A	B	C	D	AZΣ	AZΔ	ΔQ	ELΔ
	A	-	Isolation	Isolation	Isolation	0°	-91°	182°	92°
	B	Isolation	-	Isolation	Isolation	0°	-91°	2°	-89°
	C	Isolation	Isolation	-	Isolation	0°	90°	179°	-92°
	D	Isolation	Isolation	Isolation	-	0°	90°	-1°	89°
	AZΣ	0°	0°	0°	0°	-	Isolation	Isolation	Isolation
	AZΔ	-91°	-91°	90°	90°	Isolation	-	Isolation	Isolation
	ΔQ	182°	2°	179°	-1°	Isolation	Isolation	-	Isolation
ELΔ	92°	-89°	-92°	89°	Isolation	Isolation	Isolation	-	

Phase Data Relative to AZΣ @ +85°C		A	B	C	D	AZΣ	AZΔ	ΔQ	ELΔ
	A	-	Isolation	Isolation	Isolation	0°	-91°	181°	91°
	B	Isolation	-	Isolation	Isolation	0°	-91°	1°	-89°
	C	Isolation	Isolation	-	Isolation	0°	89°	179°	-91°
	D	Isolation	Isolation	Isolation	-	0°	89°	0°	90°
	AZΣ	0°	0°	0°	0°	-	Isolation	Isolation	Isolation
	AZΔ	-91°	-91°	89°	89°	Isolation	-	Isolation	Isolation
	ΔQ	181°	1°	179°	0°	Isolation	Isolation	-	Isolation
ELΔ	91°	-89°	-91°	90°	Isolation	Isolation	Isolation	-	

Phase Data Relative to AZΣ @ -55°C		A	B	C	D	AZΣ	AZΔ	ΔQ	ELΔ
	A	-	Isolation	Isolation	Isolation	0°	-91°	181°	91°
	B	Isolation	-	Isolation	Isolation	0°	-91°	1°	-89°
	C	Isolation	Isolation	-	Isolation	0°	89°	178°	-92°
	D	Isolation	Isolation	Isolation	-	0°	89°	-2°	88°
	AZΣ	0°	0°	0°	0°	-	Isolation	Isolation	Isolation
	AZΔ	-91°	-91°	89°	89°	Isolation	-	Isolation	Isolation
	ΔQ	181°	1°	178°	-2°	Isolation	Isolation	-	Isolation
ELΔ	91°	-89°	-92°	88°	Isolation	Isolation	Isolation	-	

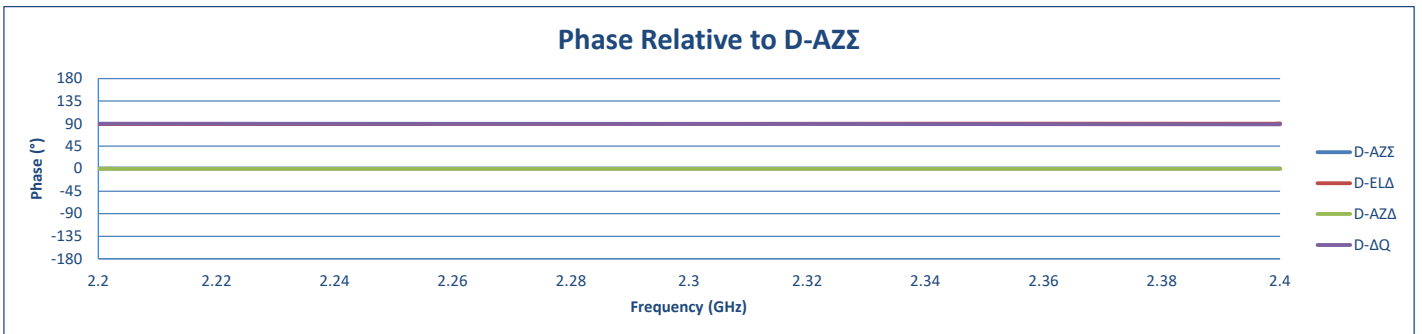
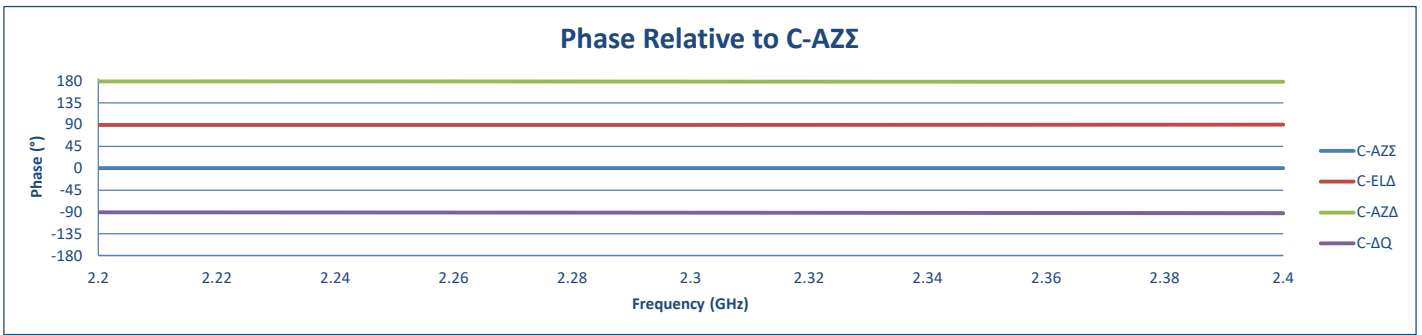
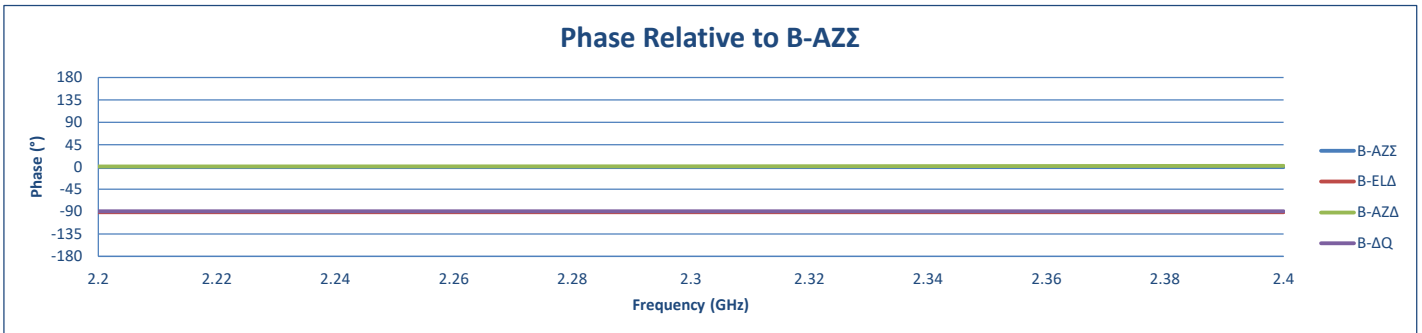
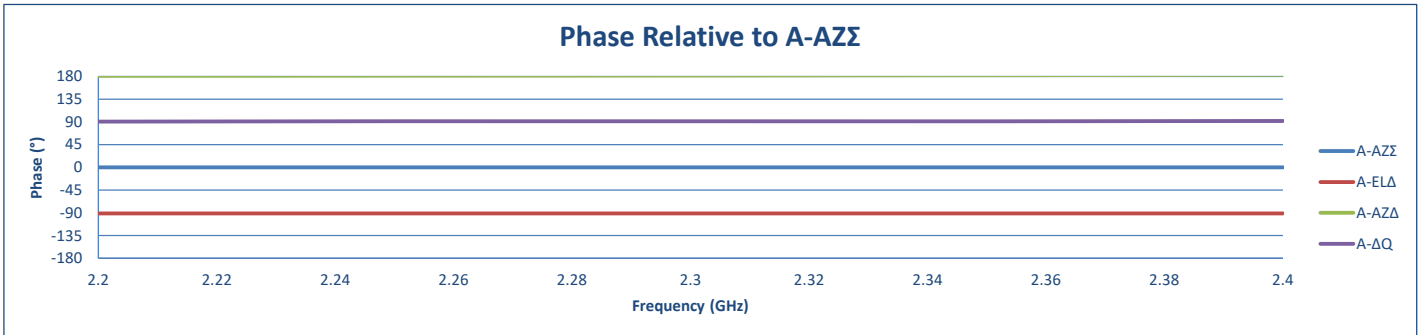
Typical Characteristics On PMC-2D22D4-6D8-SFF

Phase Data Relative to AZΣ +25°C



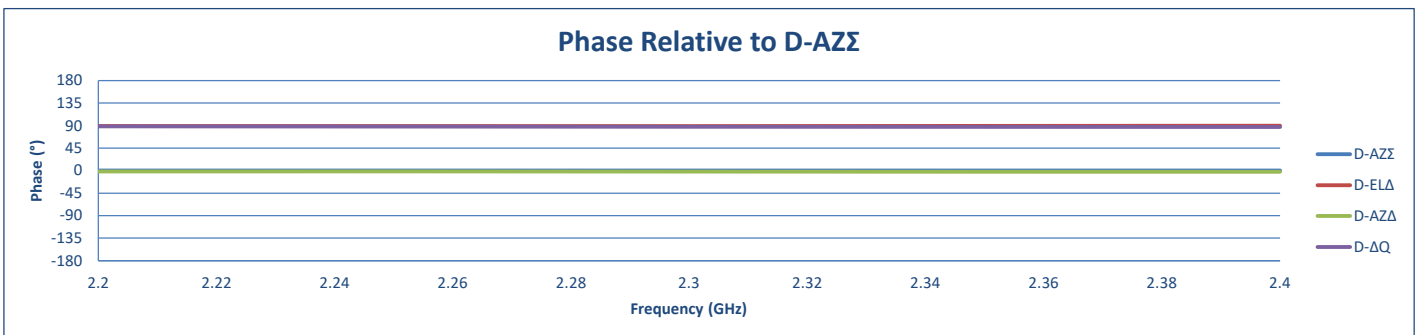
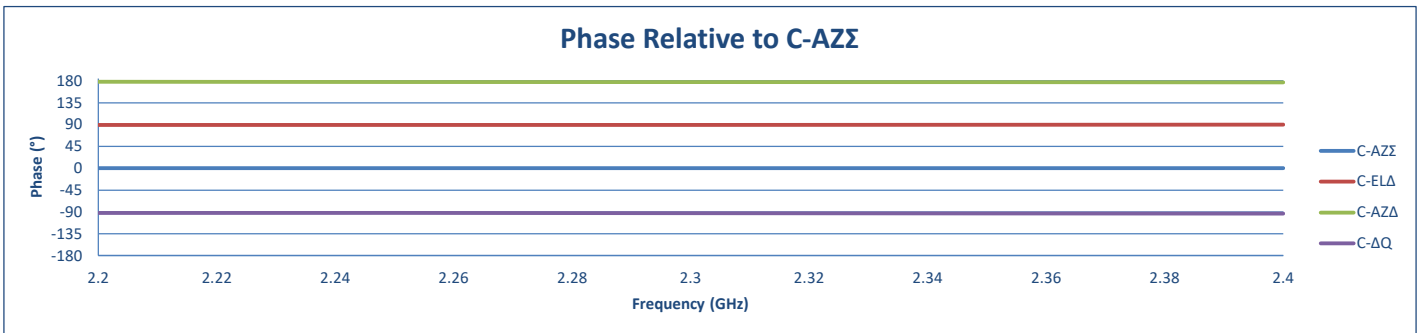
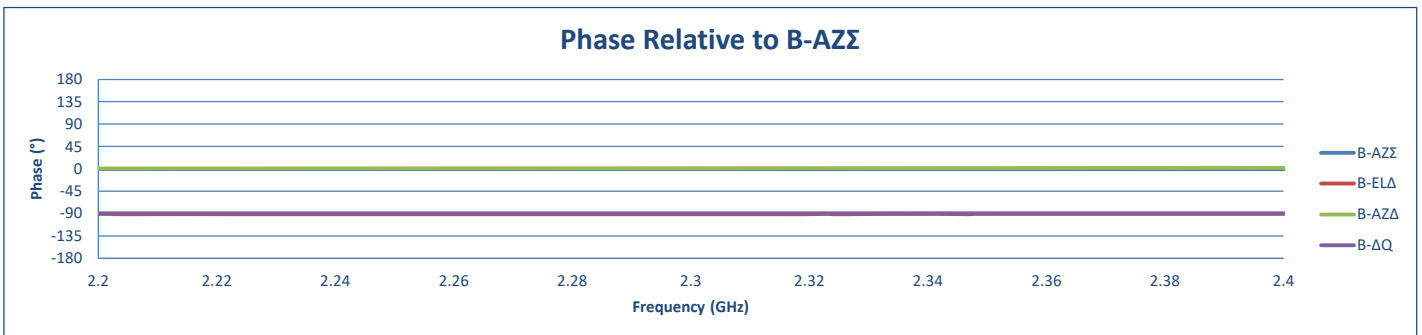
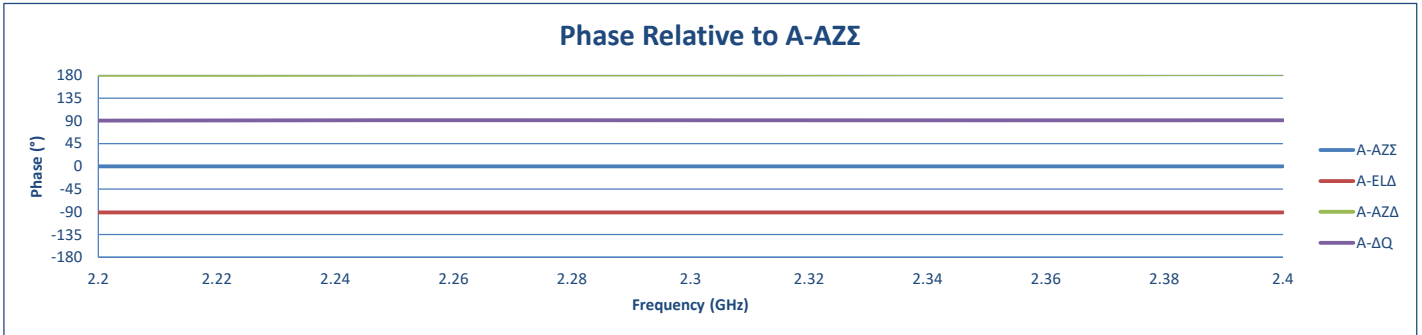
Typical Characteristics On PMC-2D22D4-6D8-SFF

Phase Data Relative to AZΣ +85°C

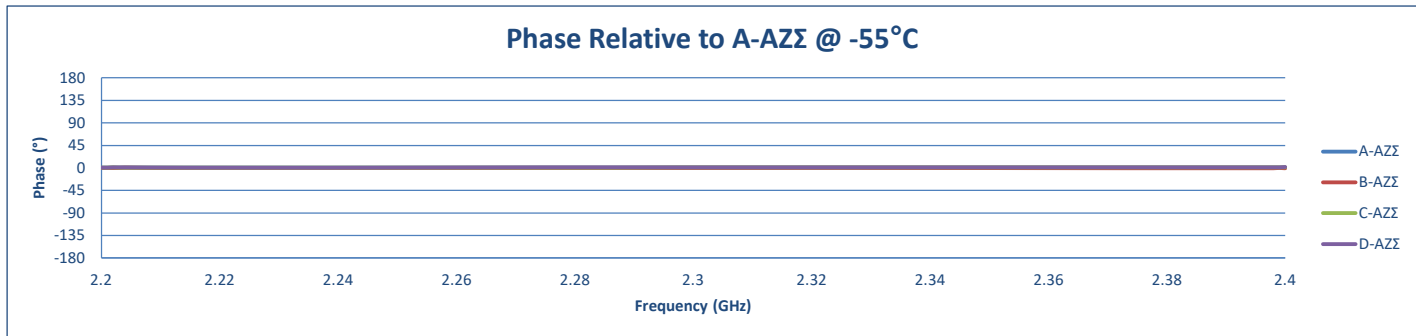
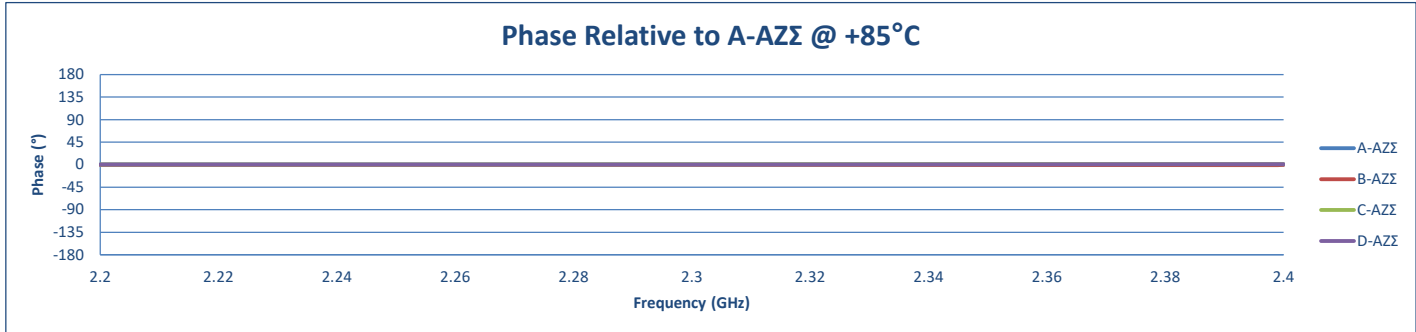
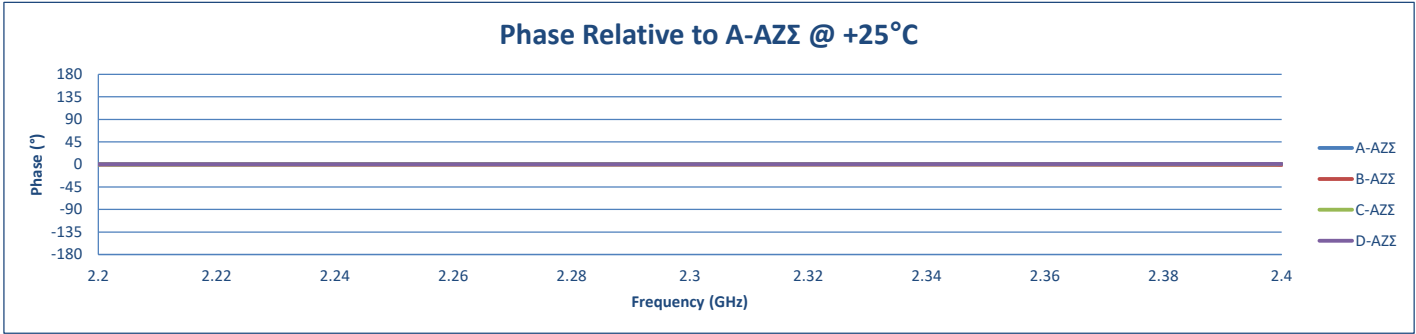


Typical Characteristics On PMC-2D22D4-6D8-SFF

Phase Data Relative to A-ZΣ -55°C



Typical Characteristics On PMC-2D22D4-6D8-SFF



High Power Test Graph @ 2.3 GHz

