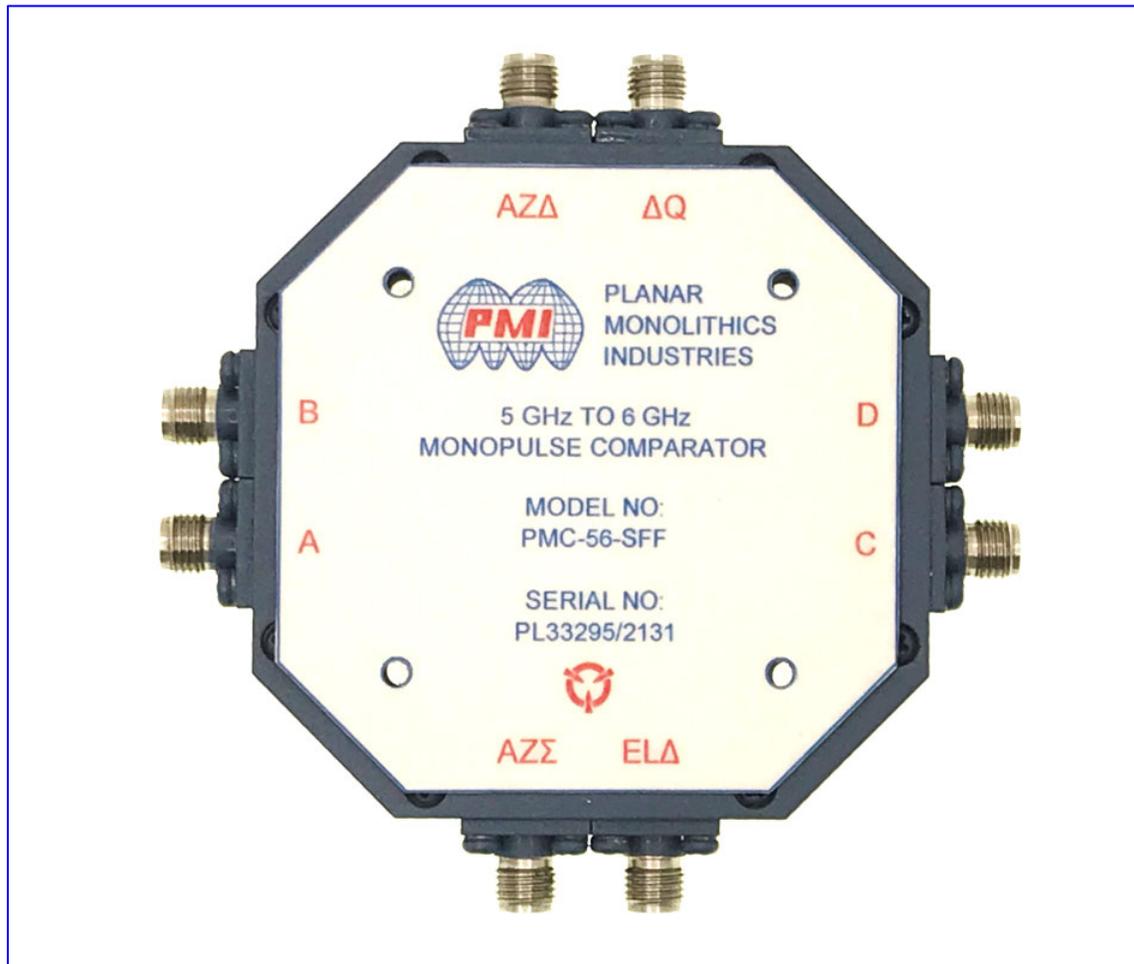




TYPICAL CHARACTERISTICS ON PMC-56-SFF

PMI MODEL: PMC-56-SFF IS A MONOPULSE COMPARATOR OPERATING OVER THE 5 TO 6 GHz FREQUENCY RANGE. THIS MODEL OFFERS A MAXIMUM 1.0 dB INSERTION LOSS WHILE MAINTAINING A MAXIMUM AMPLITUDE BALANCE OF ± 0.5 dB AND A MAXIMUM PHASE BALANCE OF $\pm 5^\circ$.



August 9, 2021

Page 1 of 10

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com



TYPICAL CHARACTERISTICS ON PMC-56-SFF

TABLE OF CONTENTS

1.	Product Feature:	3
2.	Test Data Summary at +25 Degree Celsius:	4
3.	Test Data at +25 Degree Celsius:	
	a. Insertion Loss / Isolation / VSWR:	5
	b. Phase Data Relative to AZΣ / ELΔ:	6
	c. Phase Balance:	9



TYPICAL CHARACTERISTICS ON PMC-56-SFF

OUTLINE DRAWING

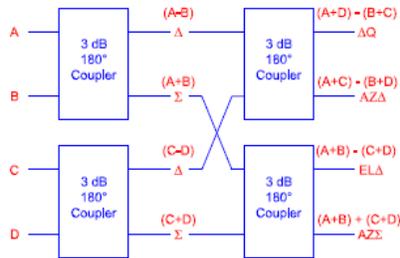
DESCRIPTION

PMI MODEL: PMC-56-SFF IS A MONOPULSE COMPARATOR OPERATING OVER THE 5 TO 6 GHz FREQUENCY RANGE THIS MODEL OFFERS A MAXIMUM 1.0 dB INSERTION LOSS WHILE MAINTAINING A MAXIMUM AMPLITUDE BALANCE OF ± 0.5 dB AND A MAXIMUM PHASE BALANCE OF $\pm 5^\circ$.

SPECIFICATIONS

- FREQUENCY RANGE: 5 GHz TO 6 GHz
- INSERTION LOSS: 1.0 dB MAXIMUM
- AMPLITUDE BALANCE: ± 0.5 dB MAXIMUM
- PHASE BALANCE: $\pm 5^\circ$ MAXIMUM
- ISOLATION: 20 dB MINIMUM
- VSWR: 1.40:1 MAXIMUM
- POWER HANDLING: AVERAGE; 50 WATT MAXIMUM (PORT A, B, C & D)
PEAK; 0.1 KW MAXIMUM
- IMPEDANCE: 50 Ω
- CONNECTORS: SMA FEMALE
- SIZE: 66.04 mm x 66.04 mm x 11 mm
2.60" x 2.60" x 0.43"
EXCLUDING CONNECTORS
- FINISH: PAINTED BLUE.

BLOCK DIAGRAM



ENVIRONMENTAL RATINGS

- TEMPERATURE: -55 °C TO +85 °C (OPERATING)
-65 °C TO +125 °C (STORAGE)
- 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

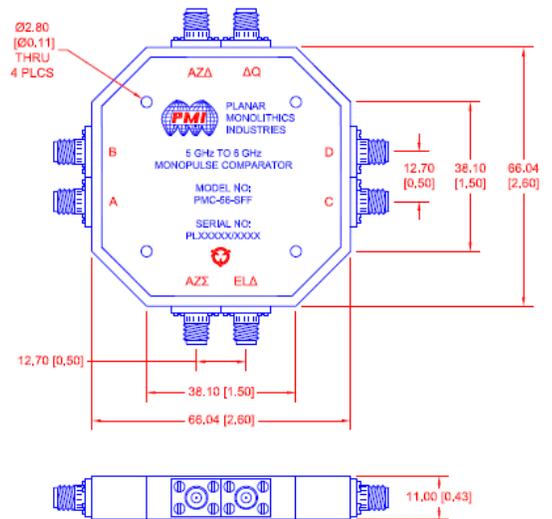
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PMI CONFIDENTIAL AND PROPRIETARY

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	12/19/20	
	B1	ECN # 21-0077	5/8/21	
	B2	ECN # 21-0132	8/9/2021	

MECHANICAL OUTLINE



PLANAR MONOLITHICS INDUSTRIES, INC.
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WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			REV.
DRAWN	JPH	11/2/20	PRODUCT FEATURE 5 TO 6 GHz Monopulse Comparator PMC-56-SFF			B2
REDRAWN			SIZE	FRGM NO.	DWG NO.	
ISSUED			A	05XQ0	27040540	
			SCALE	N:S	SHEET	1 OF 1



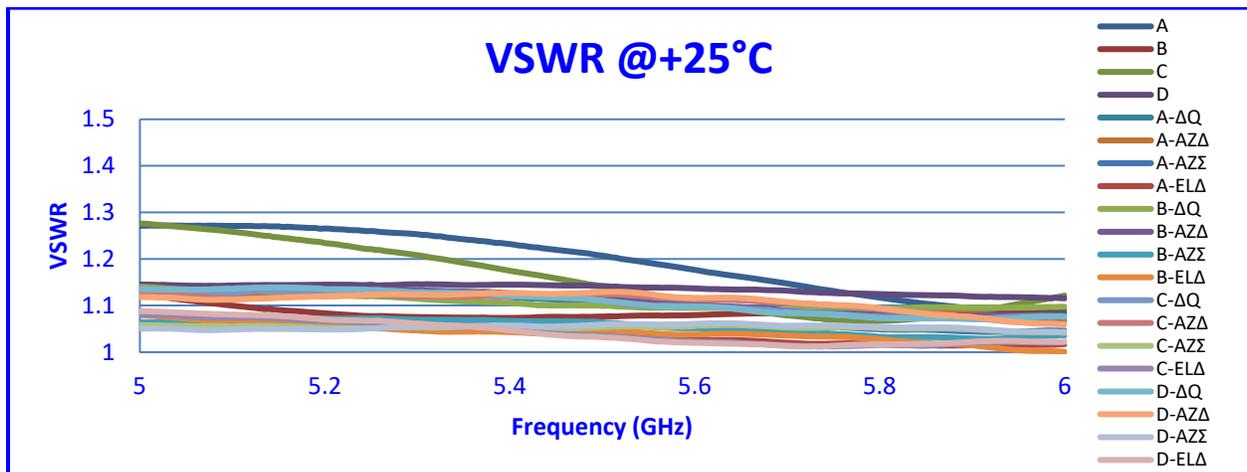
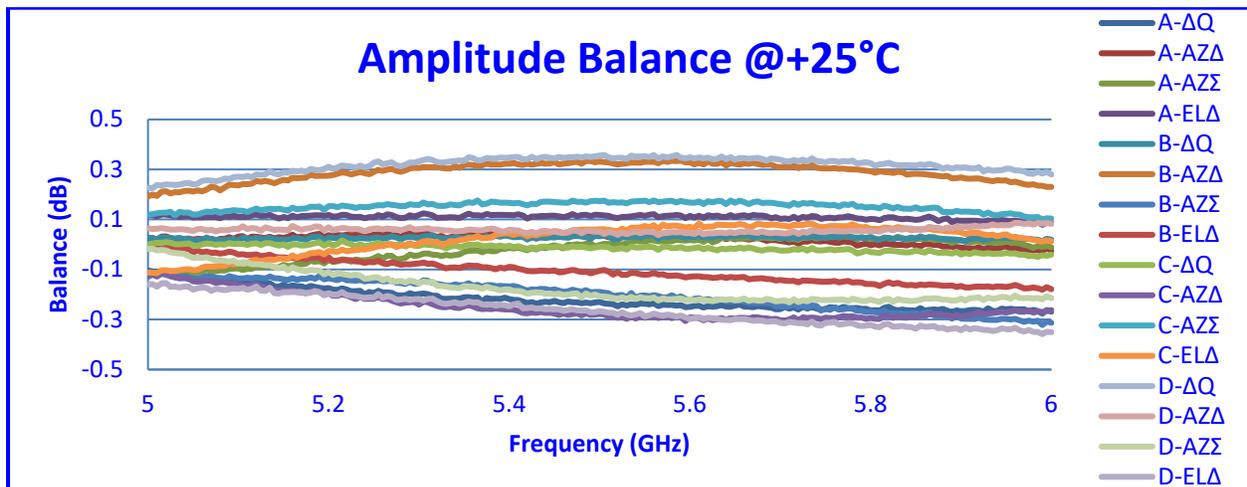
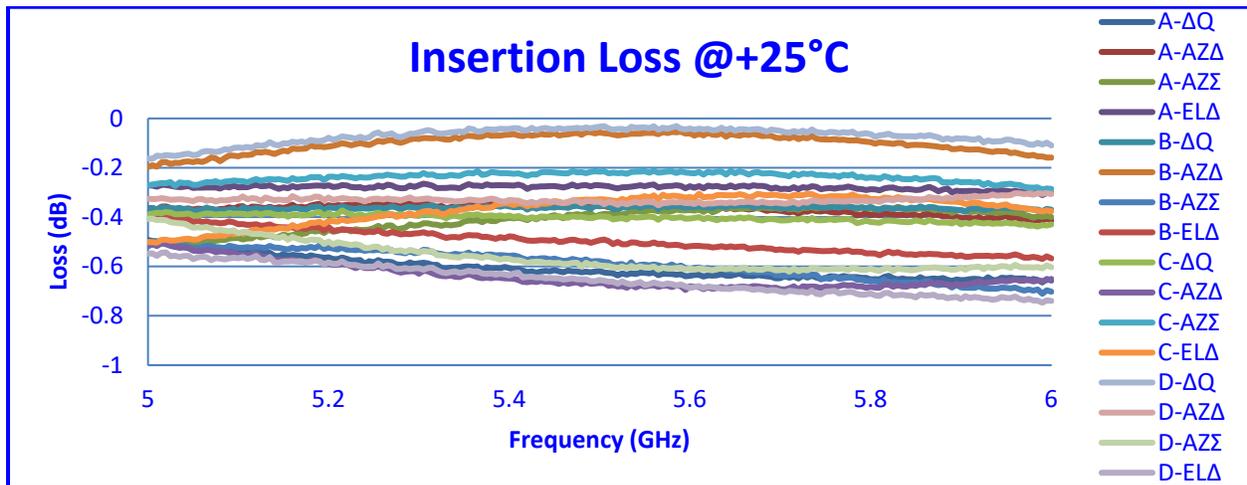
TYPICAL CHARACTERISTICS ON PMC-56-SFF

TEST DATA SUMMARY AT 25°C

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	Test Results	QA QC
1	Frequency Range:	5.0 to 6.0 GHz	5.0 to 6.0 GHz	
2	Insertion Loss:	1.0 dB Maximum	0.75 dB	
3	Amplitude Balance:	±0.5 dB Maximum	±0.36 dB	
4	Phase Balance:	±5°	±3.7°	
5	Isolation:	20 dB Minimum	21.64 dB	
6	VSWR:	1.4:1 Maximum	1.29:1	
7	Power Handling:	Average: 50 Watt Maximum (Port A, B, C, & D) Peak: 1.0 kW Maximum	Pass By Design	
8	Impedance:	50 Ω	50 Ω	



TYPICAL CHARACTERISTICS ON PMC-56-SFF





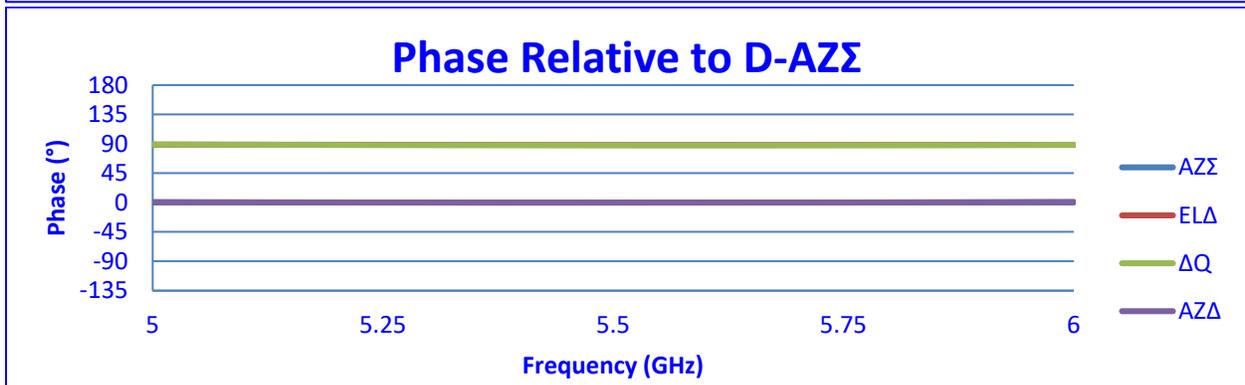
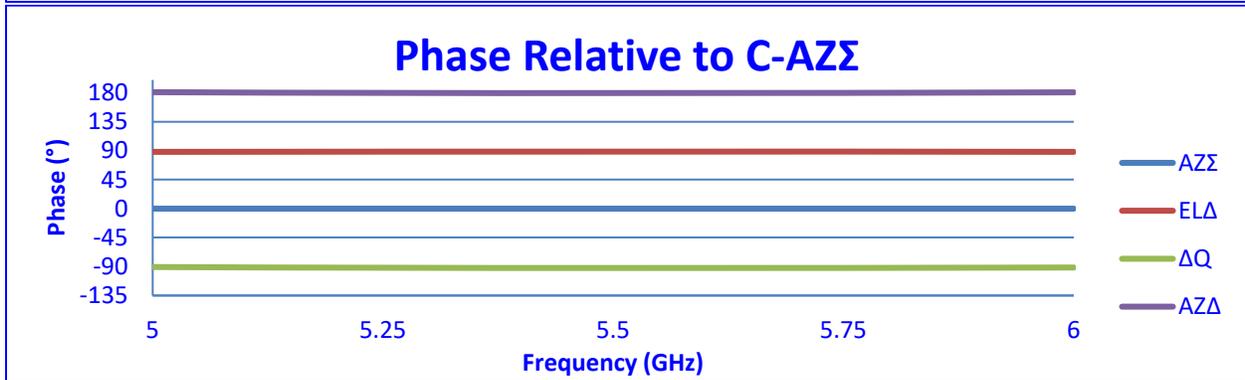
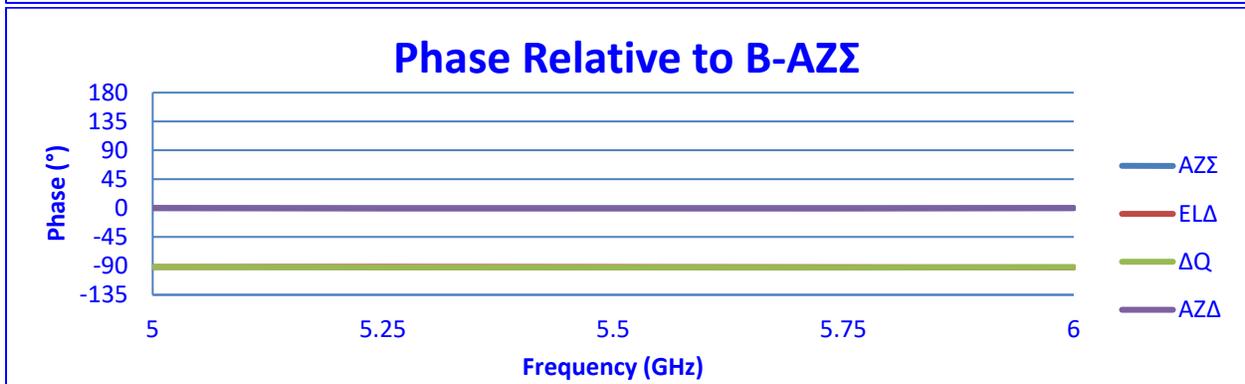
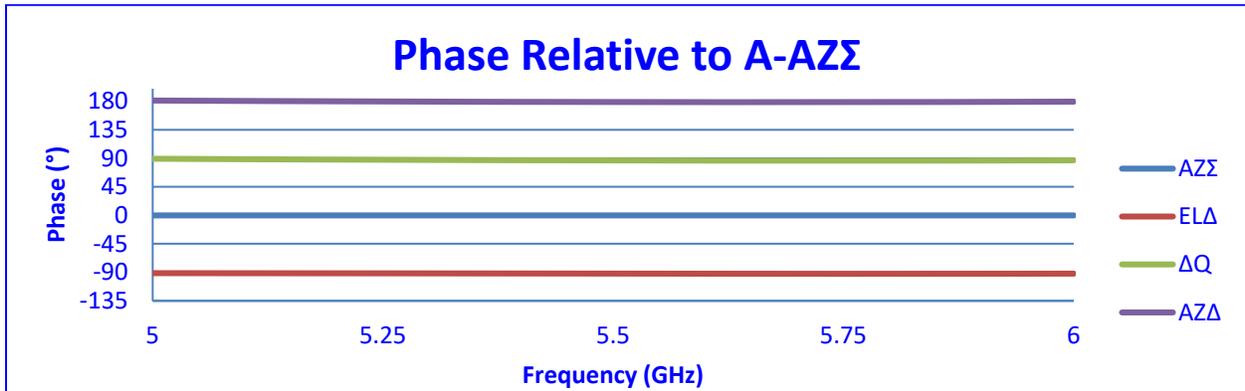
TYPICAL CHARACTERISTICS ON PMC-56-SFF

Phase Data Relative to AZΣ		A	B	C	D	ELΔ	AZΣ	ΔQ	AZΔ
	A	-	Isolation	Isolation	Isolation	-92°	0°	88°	180°
	B	Isolation	-	Isolation	Isolation	-92°	0°	-92°	0°
	C	Isolation	Isolation	-	Isolation	88°	0°	-92°	180°
	D	Isolation	Isolation	Isolation	-	88°	0°	88°	0°
	ELΔ	-92°	-92°	88°	88°	-	Isolation	Isolation	Isolation
	AZΣ	0°	0°	0°	0°	Isolation	-	Isolation	Isolation
	ΔQ	88°	-92°	-92°	88°	Isolation	Isolation	-	Isolation
	AZΔ	180°	0°	180°	0°	Isolation	Isolation	Isolation	-

Phase Data Relative to ELΔ		A	B	C	D	ELΔ	AZΣ	ΔQ	AZΔ
	A	-	Isolation	Isolation	Isolation	0°	92°	180°	-88°
	B	Isolation	-	Isolation	Isolation	0°	92°	0°	92°
	C	Isolation	Isolation	-	Isolation	0°	-88°	180°	92°
	D	Isolation	Isolation	Isolation	-	0°	-88°	0°	-88°
	ELΔ	0°	0°	0°	0°	-	Isolation	Isolation	Isolation
	AZΣ	92°	92°	-88°	-88°	Isolation	-	Isolation	Isolation
	ΔQ	180°	0°	180°	0°	Isolation	Isolation	-	Isolation
	AZΔ	-88°	92°	92°	-88°	Isolation	Isolation	Isolation	-

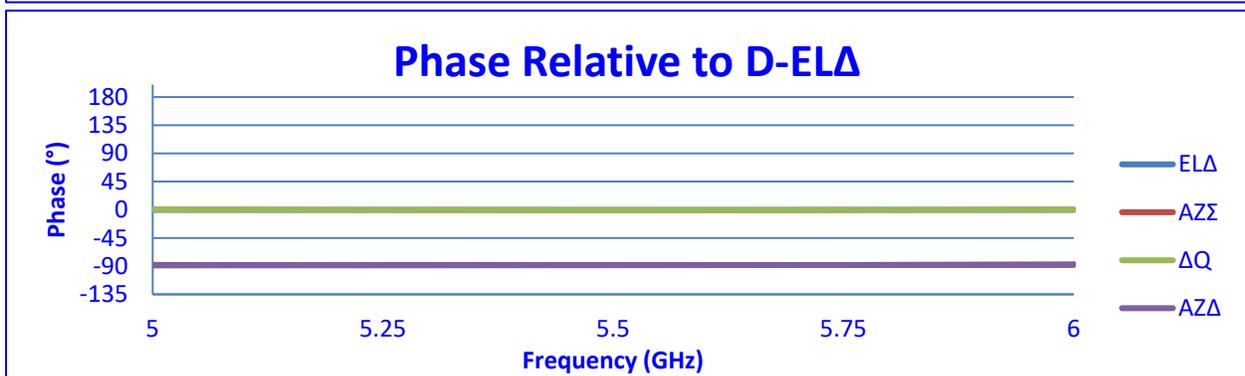
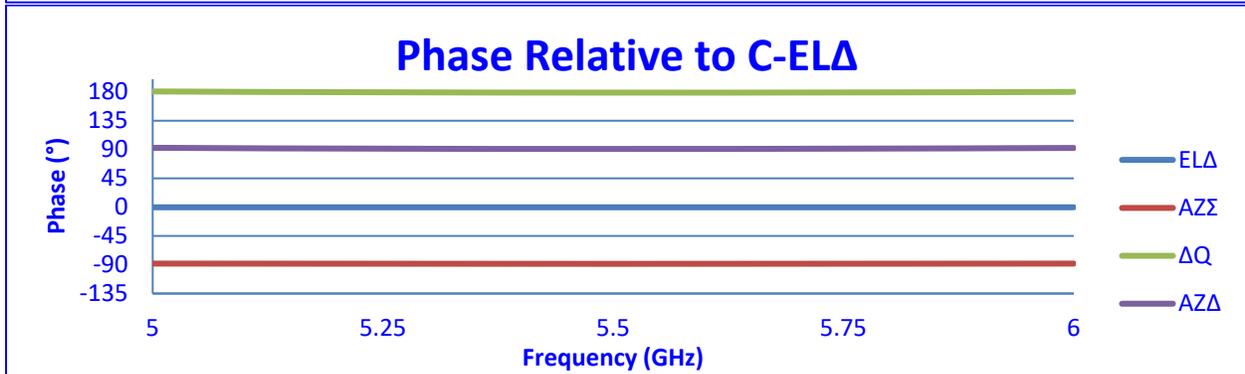
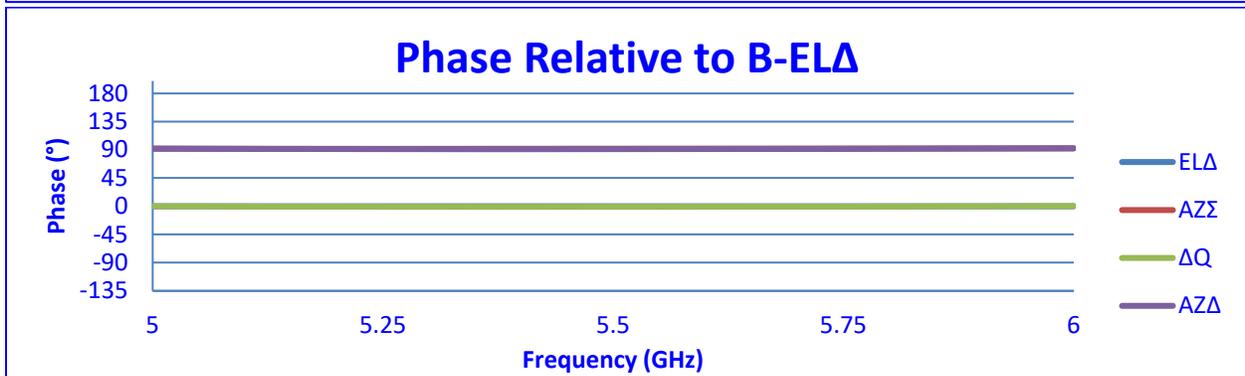
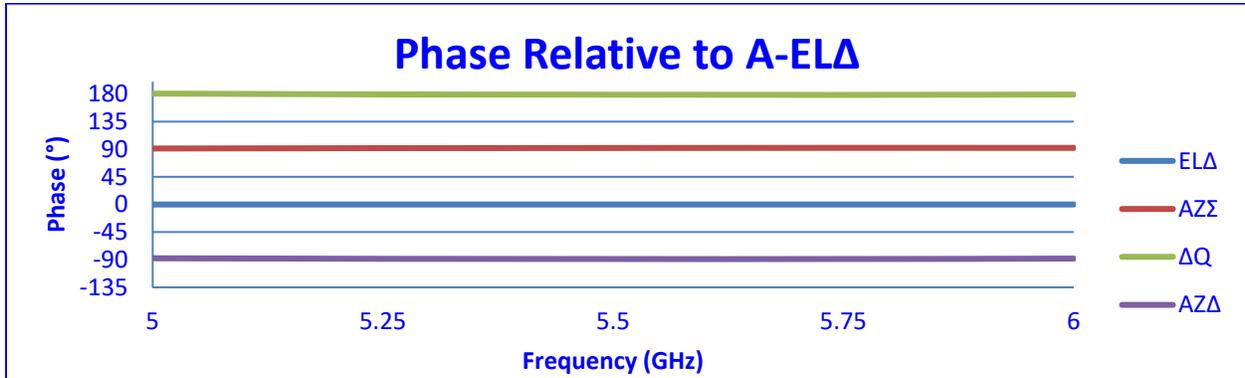


TYPICAL CHARACTERISTICS ON PMC-56-SFF



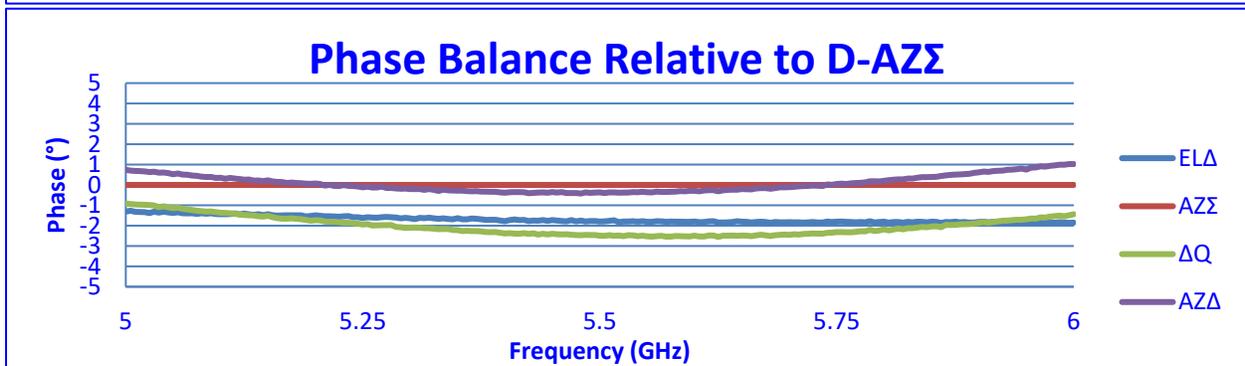
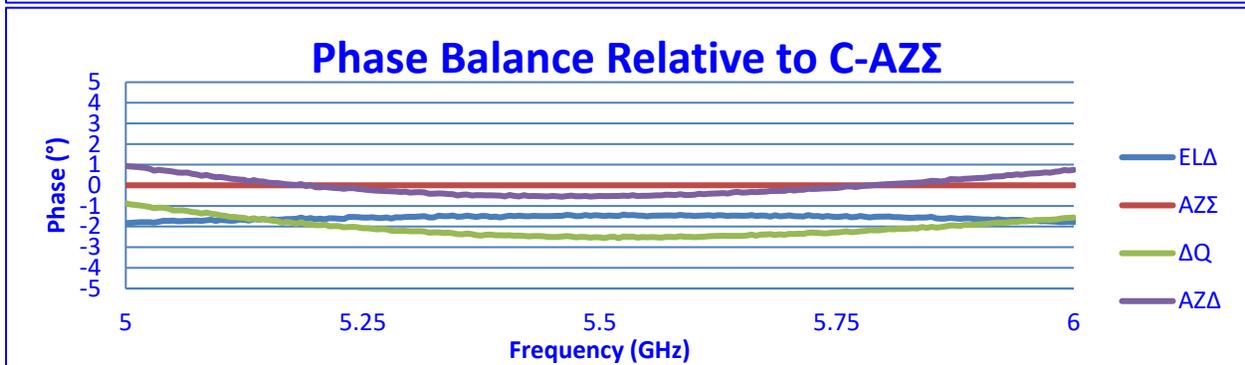
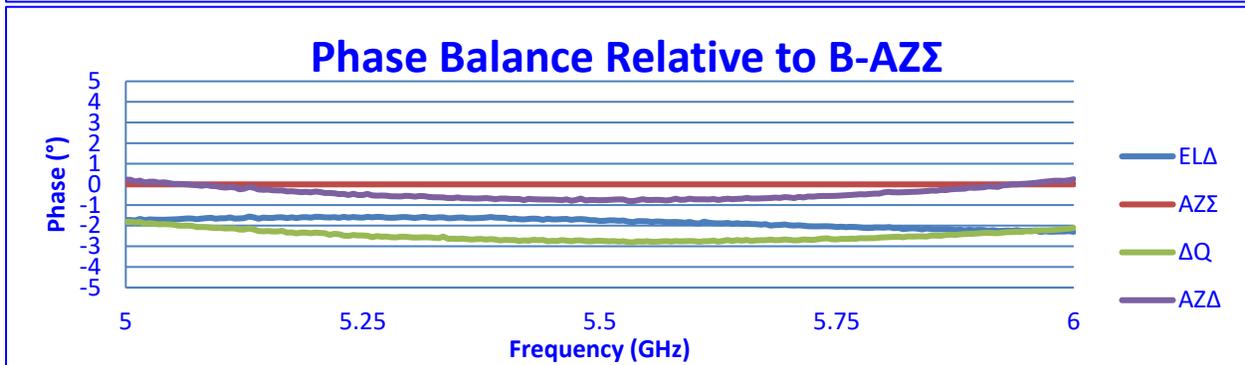
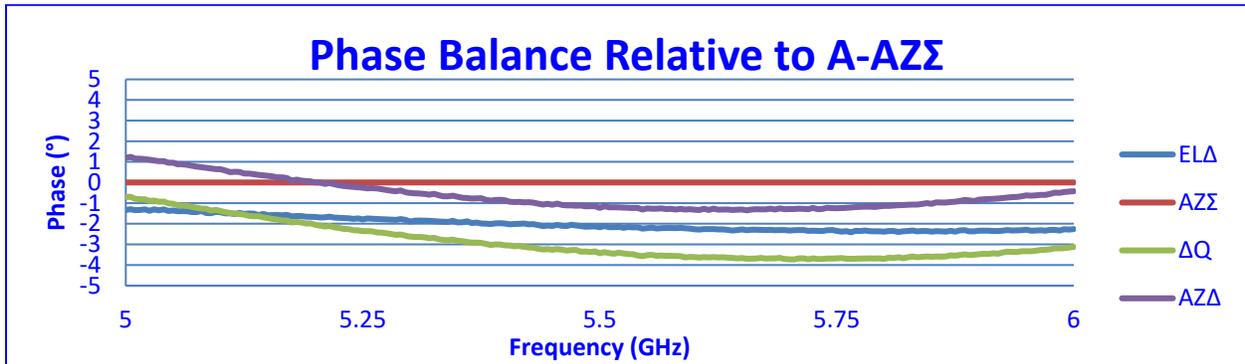


TYPICAL CHARACTERISTICS ON PMC-56-SFF





TYPICAL CHARACTERISTICS ON PMC-56-SFF





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