

DESCRIPTION

PMI MODEL: PMC-9G10G-7D9-SFF IS A MONOPULSE COMPARATOR OPERATING OVER THE 9.0 TO 10.0 GHz FREQUENCY RANGE. THIS MODEL OFFERS A MAXIMUM INSERTION LOSS OF 1.9 dB MAXIMUM IF INPUT SIGNALS AT PORTS A, B, C AND D ARE EQUAL IN AMPLITUDE OR POWER & INPHASE WITH AN OUTPUT AT PORT AZΣ. INSERTION LOSS OF 7.9 dB MAXIMUM IF INPUT SIGNAL AT PORT A, B, C OR D AND ALL OTHER PORTS ARE TERMINATED TO 50 OHMS WITH AN OUTPUT AT PORTS ELΔ, AZΣ, AQ OR AZΔ, WHILE MAINTAINING A MAXIMUM AMPLITUDE BALANCE OF ±0.6 dB AND A MAXIMUM PHASE BALANCE OF ±6°.

SPECIFICATIONS

- FREQUENCY RANGE: ----- 9.0 GHz TO 10.0 GHz
- INSERTION LOSS: ----- 1.9 dB MAXIMUM (If input signals at ports A, B, C and D are equal Amplitude or Power & Inphase with an output at Port AZΣ)
- INSERTION LOSS: ----- 7.9 dB MAXIMUM (If input signals at port A, B, C or D and all other ports are terminated to 50 Ohms with an output at ports ELΔ, AZΣ, ΔQ or AZΔ)
- AMPLITUDE BALANCE: ----- ±0.6 dB MAXIMUM
- PHASE BALANCE: ----- ±6° MAXIMUM
- ISOLATION: ----- 18 dB MINIMUM
- VSWR: ----- 1.6:1 MAXIMUM
- POWER HANDLING: ----- AVERAGE: 10 WATT MAXIMUM (PORT A, B, C & D)
PEAK: 0.1 KW MAXIMUM
- IMPEDANCE: ----- 50 Ω
- CONNECTORS: ----- SMA FEMALE
- SIZE: ----- 88.49 mm x 88.49 mm x 11 mm
3.48" x 3.48" x 0.43"
EXCLUDING CONNECTORS
- FINISH: ----- PAINTED BLUE

PHASE OFFSET FOR EACH PORT IN REFERENCE TO NORMALIZED A TO ΣAZ

	ΣAZ	ΔEL	ΔQ	ΔAZ
A	0	90	180	-90
B	0	-90	0	-90
C	0	90	0	90
D	0	-90	180	90

ENVIRONMENTAL RATINGS

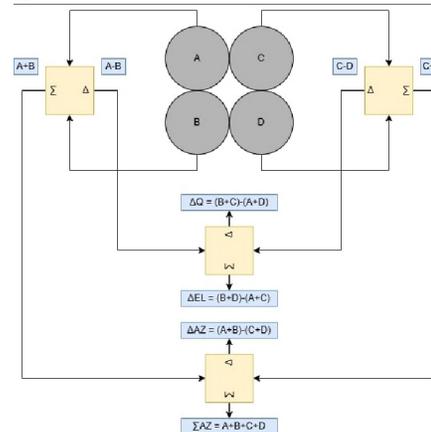
- TEMPERATURE: ----- -55 °C TO +85 °C (OPERATING)
-65 °C TO +125 °C (STORAGE)
- HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B
- SHOCK: ----- MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: ----- MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: ----- 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

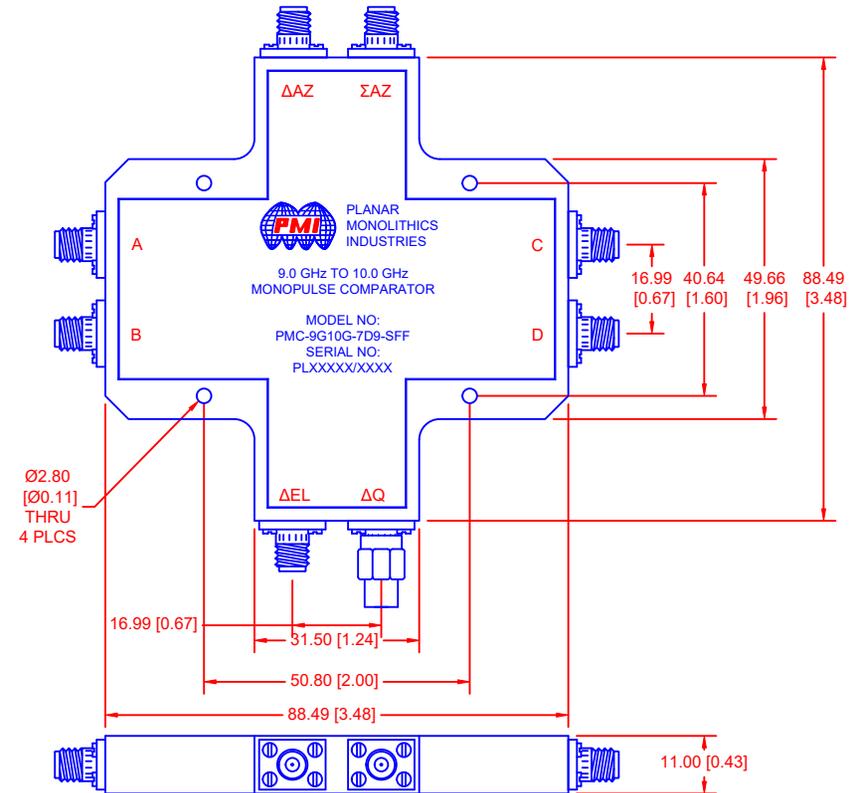
BLOCK DIAGRAM



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	7/26/18	
	B1	ECN # 25-0111	4/9/25	

MECHANICAL OUTLINE



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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN SPH		7/14/17	PRODUCT FEATURE		
REDRAWN SPU		7/26/18	9.0 TO 10.0 GHz Monopulse Comparator		
ISSUED			PMC-9G10G-7D9-SFF		
SIZE A	FSCM NO. 05XQ0	DWG NO. 27035520	REV. B1		
SCALE N:S	SHEET 1 OF 1				