

**DESCRIPTION:**

PMI MODEL: QC-1G18G IS A QUADRATURE HYBRID COUPLER THAT OPERATES OVER THE FREQUENCY RANGE OF 1.0 GHz TO 18.0 GHz. THIS MODEL PROVIDES LOW LOSS OF 2 dB AND AN ISOLATION OF 16 dB MINIMUM. THE VSWR IS 1.60:1 MAXIMUM WITH AN AMPLITUDE BALANCE OF ±0.9 dB MAXIMUM AND A PHASE BALANCE OF ±8° MAXIMUM. THIS COUPLER IS OUTFITTED WITH N-TYPE FEMALE CONNECTORS.

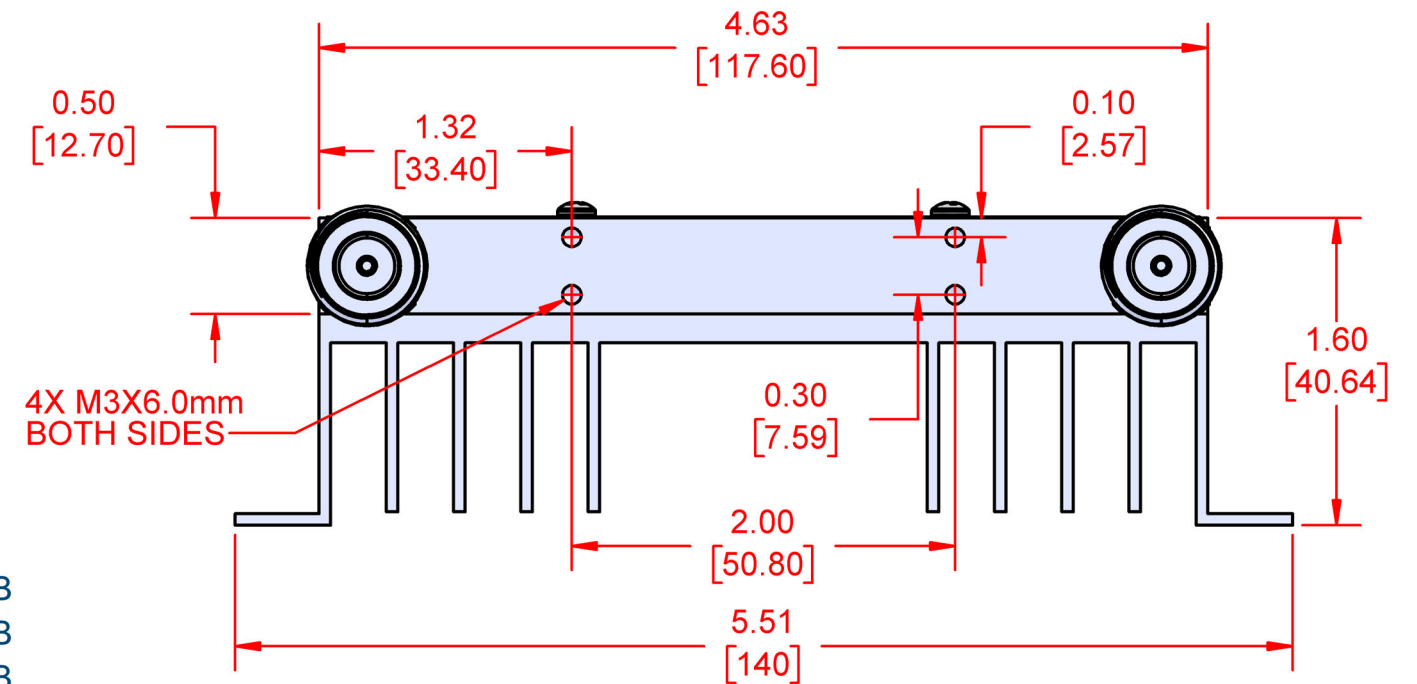
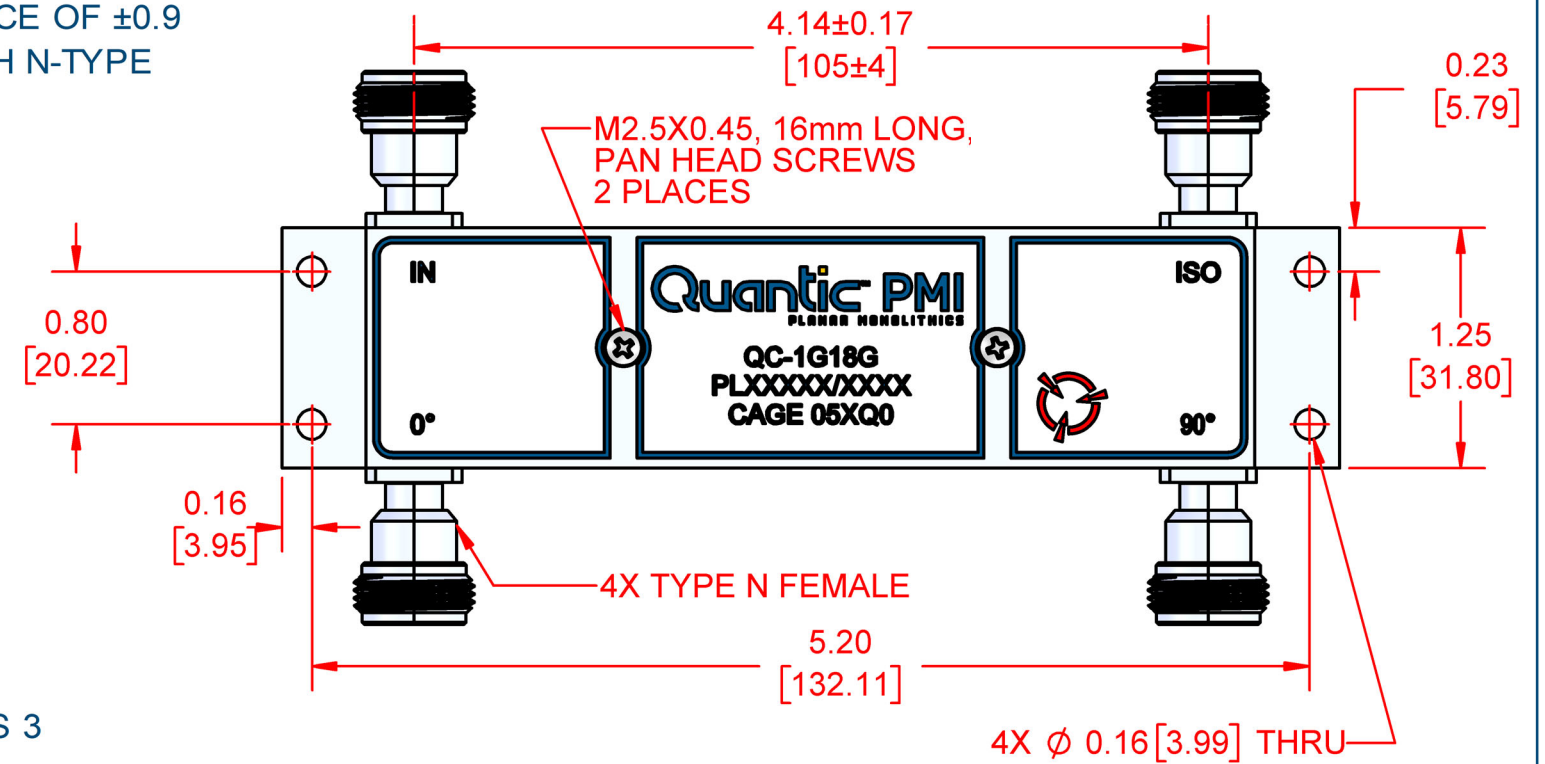
**SPECIFICATIONS:**

- FREQUENCY RANGE:..... 1.0 GHz TO 18.0 GHz
- ISOLATION:..... 16 dB MINIMUM
- VSWR:..... 1.60:1 MAXIMUM
- COUPLING:..... 3 dB
- INSERTION LOSS:..... 2 dB MAXIMUM
- INPUT POWER:..... 300 W CW AVERAGE, 3kW PEAK
- AMPLITUDE BALANCE:..... ±0.9 dB MAXIMUM
- PHASE BALANCE:..... ±8° MAXIMUM
- CONNECTORS:..... N-TYPE FEMALE
- SIZE:..... 5.51" x 1.60" x 1.25"
- FINISH:..... CHEMICALLY COATED  
IAW MIL-DTL-5541, TYPE II, CLASS 3

**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:..... -45°C TO +75°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

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	01/08/2025	



PMI CONFIDENTIAL AND PROPRIETARY

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

APPROVALS DRAWN V. PRATAP REDRAWN ISSUED		DATE		TITLE OUTLINE QC-1G18G	
		01/08/2025			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± .XXX ± 0.01		SIZE	FSCM NO.	DWG NO.	REV.
		B	05XQ0	27050380	A1
		SCALE 1:1		SHEET 1 OF 1	

**Quantic PMI**  
PLANO MONOLITHICS

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