

## DESCRIPTION

PMI MODEL: QC-1G18G-OPTION4518 IS A QUADRATURE HYBRID COUPLER THAT IS OPTIMIZED TO OPERATE OVER THE FREQUENCY RANGE OF 4.5 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  $\pm 0.9$  dB MAXIMUM AND A PHASE BALANCE OF  $\pm 8^\circ$  MAXIMUM. THIS COUPLER IS OUTFITTED WITH N-TYPE FEMALE CONNECTORS.

## SPECIFICATIONS

- \* FREQUENCY RANGE: 4.5 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, 3 kW PEAK
- \* AMPLITUDE BALANCE:  $\pm 0.9$  dB MAXIMUM
- \* PHASE BALANCE:  $\pm 8^\circ$  MAXIMUM
- \* CONNECTORS: N-TYPE FEMALE
- \* SIZE: 5.67" x 1.60" x 1.25"

## 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

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

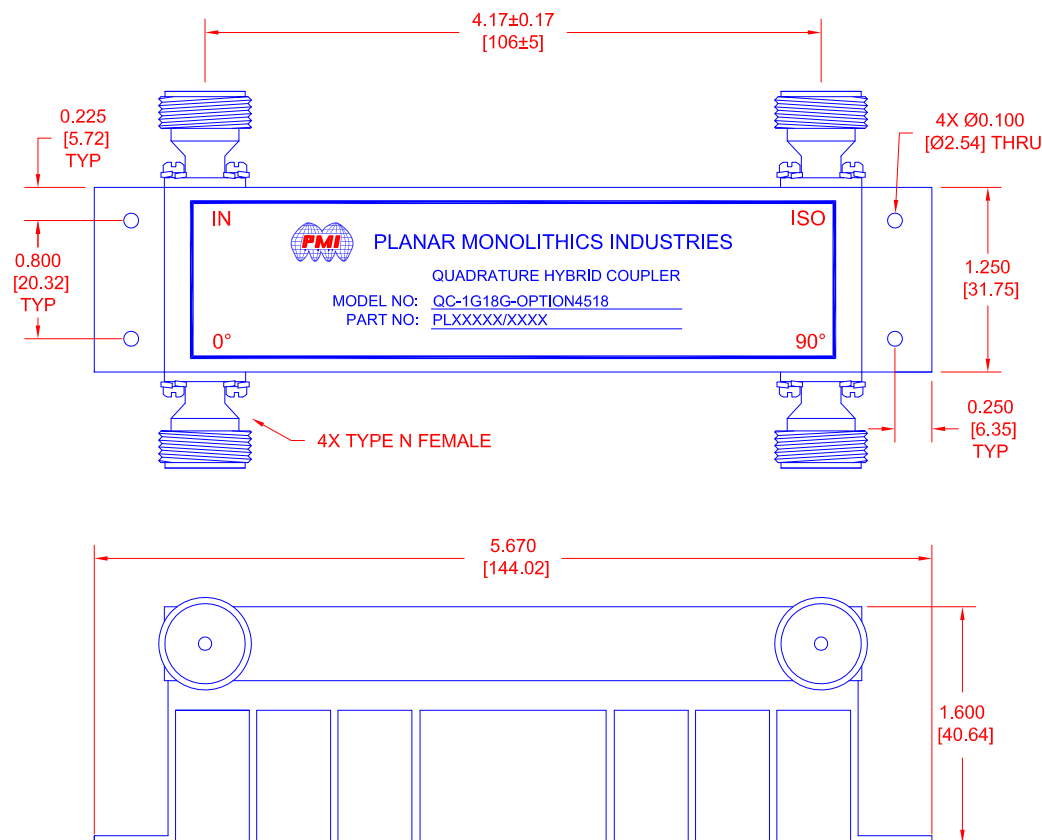
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

**PMI CONFIDENTIAL AND PROPRIETARY**

ALL DIMENSIONS  
ARE IN INCHES (mm)  
TOLERANCES:  
X.XX  $\pm 0.020$   
X.XXX  $\pm 0.010$

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	12/22/15	JSP

## MECHANICAL OUTLINE



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ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE		
DRAWN		M. Berry		12/22/15		PRODUCT FEATURE QC-1G18G-OPTION4518
CHECKED						
ISSUED						
SIZE	A	FSCM NO.	05XQ0	DWG NO.	PRELIMINARY	REV. -
SCALE	N:S				SHEET	1 OF 1