

**DESCRIPTION:**

PMI'S 3dB, 90 DEGREE QUADRATURE COUPLERS ARE AVAILABLE IN BANDWIDTHS OF 2.0 TO 4.0 GHZ, 2.5 TO 5.0 GHZ, 4.0 TO 8.0 GHZ, 5.0 TO 10.0 GHZ, 6.0 TO 12.0 GHZ AND 8.0 TO 18.0 GHZ. THEY ARE DESIGNED FOR LOW INSERTION LOSS, LOW VSWR, PHASE AND AMPLITUDE BALANCED AND PACKAGED IN A VERY SMALL SIZE.

**SPECIFICATIONS:**

- FREQUENCY:
 

QC-2040 FREQUENCY: 2-4 GHZ	QC-5010 FREQUENCY: 5-10 GHZ
QC-2550 FREQUENCY: 2.5-5 GHZ	QC-6012 FREQUENCY: 6-12 GHZ
QC-4080 FREQUENCY: 4-8 GHZ	QC-8018 FREQUENCY: 8-18 GHZ
- INSERTION LOSS:
 

QC-2040 0.30 dB MAX	QC-5010 1.20 dB MAX
QC-2550 0.50 dB MAX	QC-6012 1.2 dB MAX
QC-4080 0.60 dB MAX	QC-8018 1.5 dB MAX
- ISOLATION:
 

QC-2040 20 dB MIN/29 dB TYP.	QC-5010 15 dB MIN/20 dB TYP.
QC-2550 16 dB MIN/21 dB TYP.	QC-6012 16 dB MIN/22 dB TYP.
QC-4080 18 dB MIN/21 dB TYP.	QC-8018 14 dB MIN/18 dB TYP.
- VSWR MAXIMUM
 

QC-2040 1.30:1 MAX	QC-5010 1.50:1 MAX
QC-2550 1.50:1 MAX	QC-6012 1.50:1 MAX
QC-4080 1.50:1 MAX	QC-8018 1.50:1 MAX
- AMPLITUDE BALANCE
 

QC-2040 ± 0.50 dB MAX	QC-5010 ± 0.75 dB MAX
QC-2550 ± 0.75 dB MAX	QC-6012 ± 0.75 dB MAX
QC-4080 ± 0.75 dB MAX	QC-8018 ± 0.75 dB MAX
- PHASE BALANCE
 

QC-2040 ± 2.0 (DEG) MAX	QC-5010 ± 5.0 (DEG) MAX
QC-2550 ± 5.0 (DEG) MAX	QC-6012 ± 5.0 (DEG) MAX
QC-4080 ± 5.0 (DEG) MAX	QC-8018 ± 5.0 (DEG) MAX
- POWER
 

QC-2040 75 CW WATTS	QC-5010 75 CW WATTS
QC-2550 75 CW WATTS	QC-6012 50 CW WATTS
QC-4080 75 CW WATTS	QC-8018 50 CW WATTS
- WEIGHT: 1 OUNCE TYPICAL
- SIZE: 0.80 (L) x 1.20 (W) x 0.22 (H)

**ENVIRONMENTAL RATINGS:**

- TEMPERATURE: -55°C TO +85°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107D COND. A

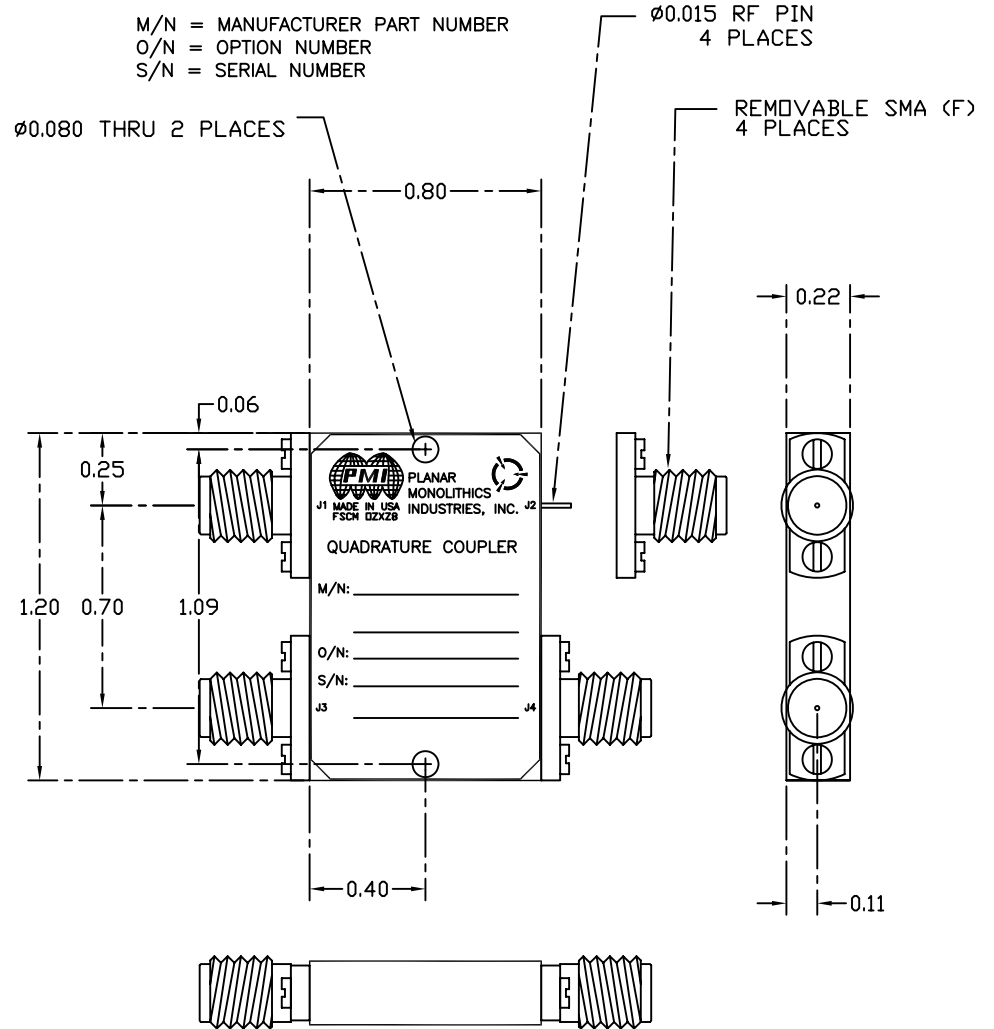
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

- X.XX ±0.020
- X.XXX ±0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE	9/9/98	



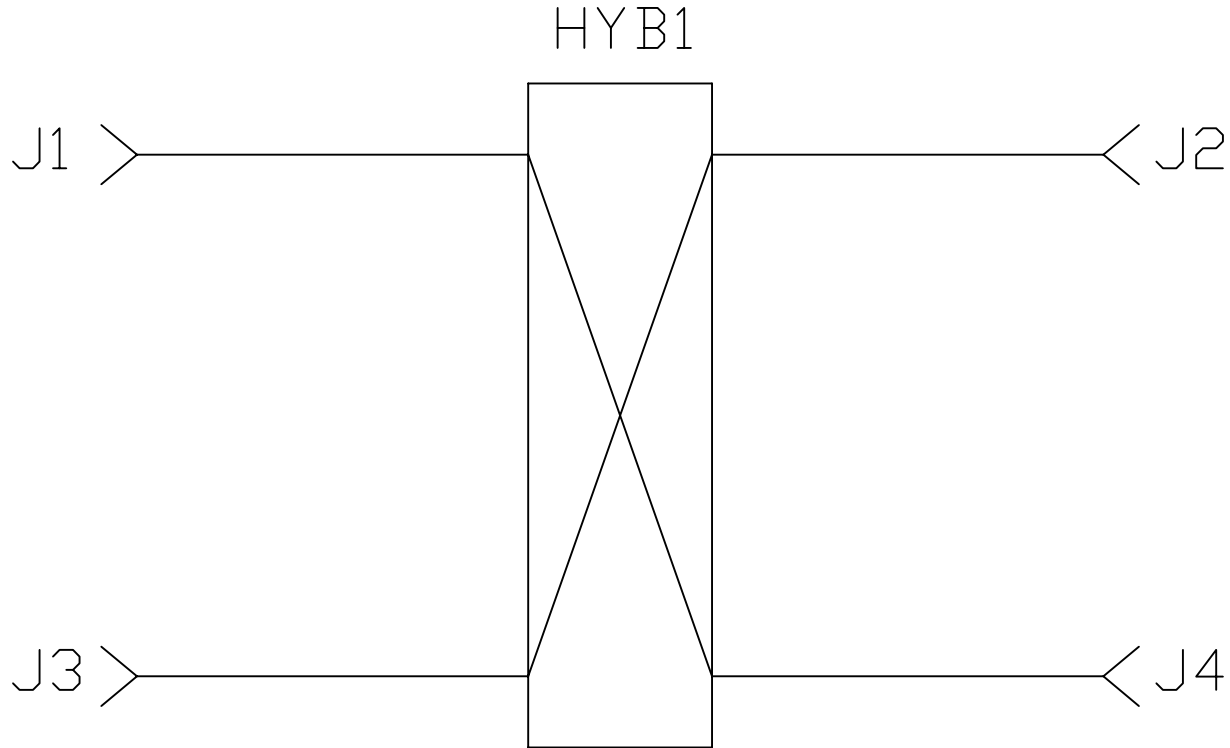
PART NO.		PLANAR MONOLITHICS INDUSTRIES, INC. FREDERICK, MARYLAND			
APPROVALS	DATE				
DRAWN <i>KJ</i>	9/9/98	TITLE 2040/2550/4080/5010 6012/8018 QUADRATURE COUPLER			
CHECKED		SIZE	FSCM NO.	DWG NO.	REV.
ISSUED		A	OZXZ8	100-4510-1	-
SCALE				SHEET 1 of 1	


**DESCRIPTION:**

PMI'S 3dB, 90 DEGREE QUADRATURE COUPLERS ARE AVAILABLE IN BANDWIDTHS OF 2.0 TO 4.0 GHz, 2.5 TO 5.0 GHz, 4.0 TO 8.0 GHz, 5.0 TO 10.0 GHz, 6.0 TO 12.0 GHz AND 8.0 TO 18.0 GHz. THEY ARE DESIGNED FOR LOW INSERTION LOSS, LOW VSWR, PHASE AND AMPLITUDE BALANCED AND PACKAGED IN A VERY SMALL SIZE.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE	9/9/98	

FUNCTIONAL SCHEMATIC:



PART NO.		 PLANAR MONOLITHICS INDUSTRIES, INC. FREDERICK, MARYLAND		
APPROVALS	DATE	TITLE		
DRAWN <i>KJ</i>	9/9/98	OUTLINE DRAWING 2040/2550/4080/5010 6012/8018 QUADRATURE COUPLER		
CHECKED		SIZE	FSCM NO.	DWG NO.
ISSUED		A	OZXZ8	100-4510-1
		SCALE		REV. -
				SHEET 1 of 1