#### DESCRIPTION:

PMI'S QC-052-YR3 IS A 3dB, 90 DEGREE QUADRATURE

COUPLER THAT WHEN A SIGNAL IS APPLIED TO ANY PORT WILL

SPLIT EQUALLY BETWEEN THE PORTS ON THE OTHER SIDE WITH THE

ADJACENT PORT REMAINING ISOLATED, THE PHASE RELATIONSHIP IS

O'N = OPTION NUMBER

O'N TO THE PORT DIRECTLY OPPOSITE AND -90° TO THE PORT ON

S/N = SERIAL NUMBER

THE DIAGONAL.

•	FREQUENCY	RANGE: · · · · · · · · · · · ·	0.5	TO	2.0	GHz
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• RF INPUT POWER HANDLING: .....10 WATT CW

• AMPLITUDE BALANCE: ±2.5 dB MAXIMUM

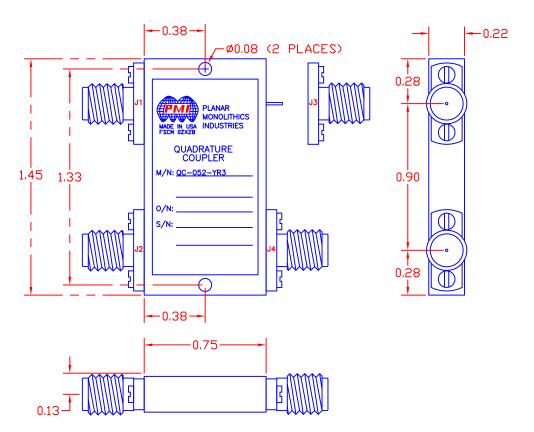
• PHASE BALANCE: .....90° ±2.5° MAXIMUM

• VSWR (ALL PORTS):-----1.5:1 MAXIMUM

• WEIGHT: ..... 1.0 OUNCE TYPICAL

• SIZE:-----1.45" X 0.75" X 0.22"

PATH TABLE								
	J1	J2	J3 J4					
J1	INPUT	-3dB/-90°	-3dB/0°	ISOLATED				
J2	-3dB/-90°	INPUT	ISOLATED	-3dB/0°				
J3	-3dB/0°	ISOLATED	INPUT	-3dB/-90°				
J4	ISOLATED	-3dB/0°	-3dB/-90°	INPUT				



## CONFIDENTIAL AND PROPRIETARY

**REVISIONS** 

6/5/03

DESCRIPTION
ORIGINAL RELEASE

#### **ENVIRONMENTAL RATINGS:**

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

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.010
X.XXX ±0.005

PART NO.			PLANAR MONOLITHICS INDUSTRIES FREDERICK, MARYLAND				
APPROVALS	DATE	TITLE	PRODUCT FFATURE				
DRAWN KAB	6/5/03	QC-052-YR3 0.5 TO 2.0 GHz MINIATURE					
redrawn $\mathcal{J}\mathcal{D}\mathcal{I}$	8/10/04	QUADRATURE COUPLER					
ISSUED		SIZE	FSCM NO.		DWG NO.	EV.	
		Α	OZ)	XZ8	100-4510-2	-	
		SCALE N:S			SHEET 1 of 3		

### DESCRIPTION:

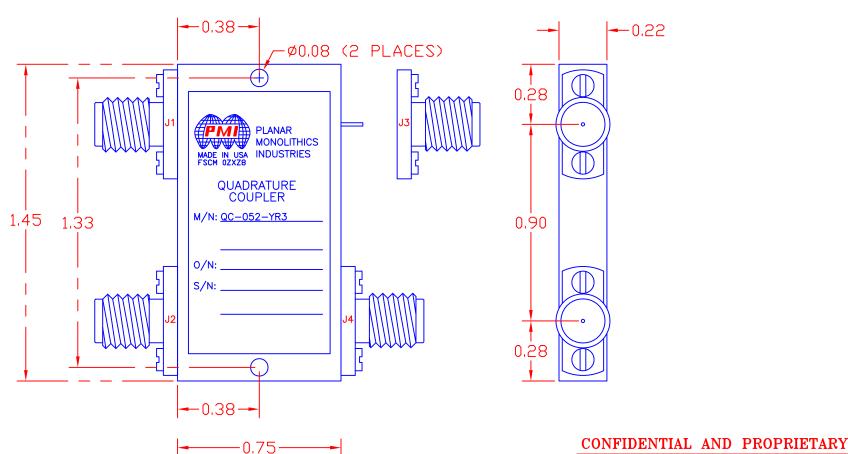
PMI'S QC-052-YR3 IS A 3dB, 90 DEGREE QUADRATURE COUPLER THAT WHEN A SIGNAL IS APPLIED TO ANY PORT WILL REMAINING ISOLATED, THE PHASE 0° TO THE PORT DIRECTLY OPPOSITE AND -90° TO THE PORT ON THE DIAGONAL.

**REVISIONS** DESCRIPTION ORIGINAL RELEASE 6/5/03

M/N = MANUFACTURER PART NUMBER

O/N = OPTION NUMBER

S/N = SERIAL NUMBER



ALL DIMENSIONS ARE IN INCHES

TOLERANCES: X.XX ±0.010 X.XXX ±0.005

PART NO.	PMI		
APPROVALS	DATE	TITLE	•••
DRAWN KAB	6/5/03		0
redrawn $\mathcal{J}\mathcal{D}\mathcal{J}$	8/10/04		U
ISSUED		SIZE	FSCM NO
		Δ	l 07

PLANAR MONOLITHICS INDUSTRIES FREDERICK, MARYLAND

MECHANICAL OUTLINE QC-052-YR3 0.5 TO 2.0 GHz MINIATURE QUADRATURE COUPLER

ZE FSCM NO. DWG NO. 100-4510-2 0ZXZ8

SCALE N:S SHEET 2 of 3

# DESCRIPTION:

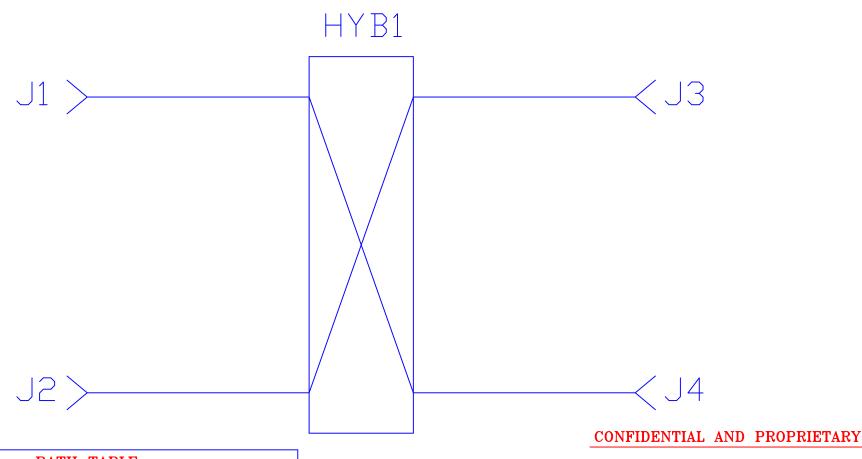
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0° TO THE PORT DIRECTLY OPPOSITE AND -90° TO THE PORT ON THE DIAGONAL.





PATH TABLE								
	J1	J2	J3	J4				
J1	INPUT	-3dB/-90°	-3dB/0°	ISOLATED				
J2	-3dB/-90°	INPUT	ISOLATED	-3dB/0°				
J3	-3dB/0°	ISOLATED	INPUT	-3dB/-90°				
J4	ISOLATED	-3dB/0°	-3dB/-90°	INPUT				

PART NO.	•	PLANAR MONOLITHICS INDUSTRIES FREDERICK, MARYLAND							
APPROVALS	DATE	TITLE	SCHEMATIC						
DRAWN  KAB	6/5/03	QC-052-YR3 0.5 TO 2.0 GHz MINIATURE							
redrawn $\mathcal{FDI}$	8/10/04	QUADRATURE COUPLER							
ISSUED		SIZE	FSCM NO.		DWG NO.				REV.
		Α	0ZXZ8		100-4510-2		-2	_	
		SCALE N:S				SHEET	3 of 3	3	