

## PRODUCT DATA SHEET

QH8922

### Our patented 3 dB 90° Hybrid Couplers provide:

- Superior component performance starting at 3:1 Bandwidth.
- Thicker center boards for high power and increased repeatability.
- Bonded structures which eliminate any air gaps between substrates.
- More sections per bandwidth for better coupling flatness.
- Electrically shorter and physically smaller RF components.

### Features:

High Power      Wide Bandwidths      Small Size      Excellent Amplitude Balance

### Electrical Specifications:

Frequency: 150 - 2000 MHz  
Power: 100 W CW  
Insertion Loss: 0.75 dB Max.  
VSWR: 1.40:1 Max.  
Phase Balance:  $90^\circ \pm 5^\circ$  dB Max.  
Amplitude Balance:  $\pm 1.0$  dB Max.  
Isolation: 17 dB Min.

### Mechanical Specifications:

Type: Surface Mount  
QH8922-Ag: Immersion Silver (RoHS Compliant)  
Weight: 0.4 oz.  
Size: 1.47 x 1.13 x 0.16"

### Port Configurations:

J1	J2	J3	J4
Sum	-3 dB, 0°	-3 dB, -90°	Isolated
-3 dB, 0°	Sum	Isolated	-3 dB, -90°
-3 dB, -90°	Isolated	Sum	-3 dB, 0°
Isolated	-3 dB, -90°	-3 dB, 0°	Sum

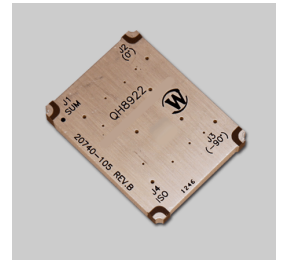
**Werlatone's** breakthrough technology allows us to build our existing line of Broadband 3 dB High Power 90° Hybrid Couplers. Connectorized 3 dB 90° Hybrid Coupler models are available with a choice of connectors. Several of our existing High Power 3 dB 90° RF Couplers are three port designs, wherein the difference port is internally terminated with a high power termination. This eliminates the need for a customer supplied external load for each Hybrid Coupler.



# WERLATONE

Model QH8922

90° Hybrids Surface Mount (SMT) & Drop

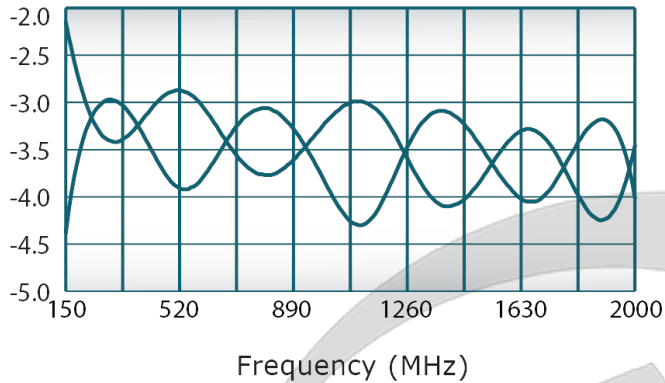


## PRODUCT DATA SHEET

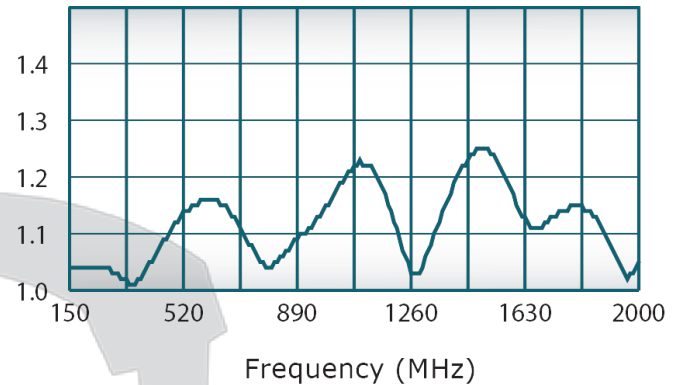
QH8922

### Performance Data (Specifications subject to change without notice):

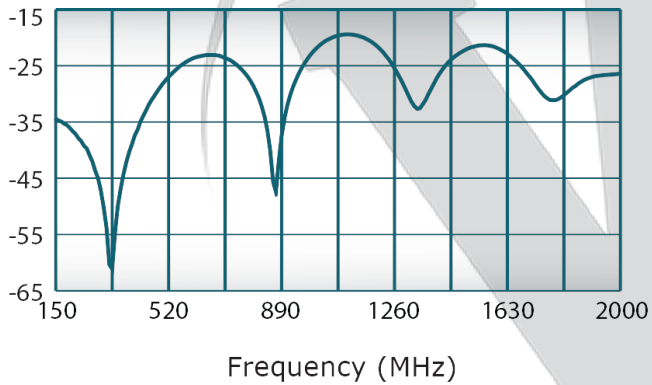
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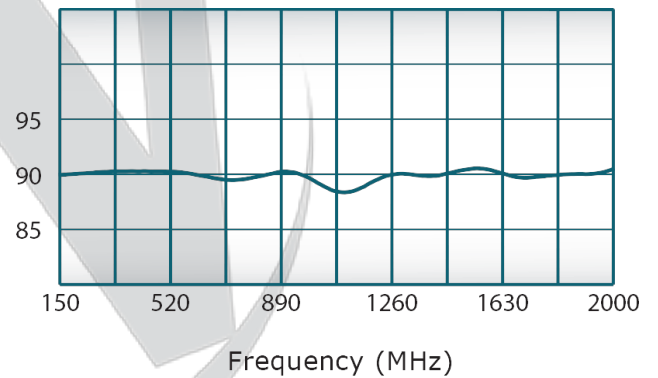
VSWR:



Isolation:



Phase Balance:



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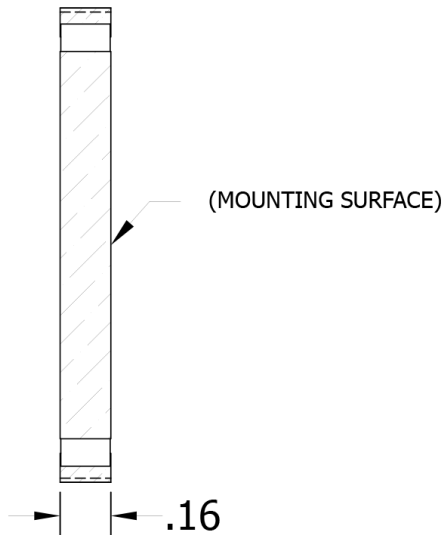
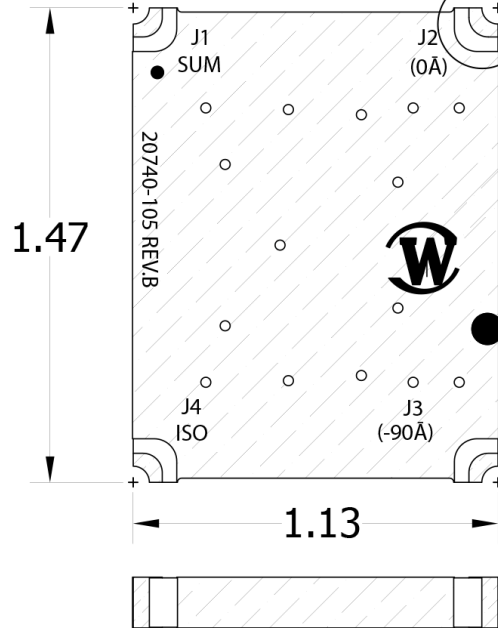
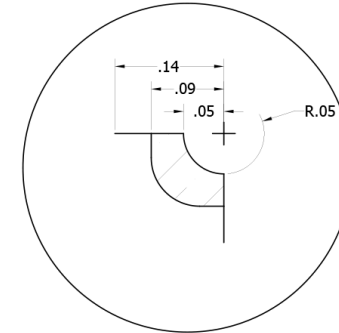
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

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SEE DETAIL A  
 (4 PLCS.)

REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
6/14/2011	-	INITIAL RELEASE	NH	BW	BW
1/27/2012	A	ECN # 5549	NH	BW	BW
4/18/2012	B	ECN # 5644	NH	BW	BW

**DETAIL A  
 SCALE 5 : 1**



UNLESS OTHERWISE SPECIFIED		DWN	DATE	W <b>WERLATONE</b>   SINCE 1965		17 Jon Barrett Rd Patterson, NY 12563	
INTERPRET DRAWING IAW MIL-STD-100		CHK	NH	DATE	06/14/11	TITLE <b>OUTLINE</b> USED ON	
DIMENSIONING PER ASME Y14.5M-2009		ENGR	BW	DATE	06/14/11		
PARAMETRICAL INFO FOR REF ONLY		QA	BW	DATE	06/14/11		
DIMENSIONS ARE IN INCHES		RLSE		DATE			
TOLERANCES: ANGLE ± 2°				DATE		SIZE	REV
3 PL DECIMALS ± .005						A	B
2 PL DECIMALS ± .015						CAGE CODE	DWG NO
THIRD ANGLE PROJECTION						28812	20740-500
						SCALE	
						1:1	

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