

## PRODUCT DATA SHEET

QH10900

### 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: 380 - 2500 MHz  
 Power: 150 W CW  
 Insertion Loss: 0.55 dB Max.  
 VSWR: 1.35:1 Max.  
 Phase Balance:  $\pm 5^\circ$  dB Max.  
 Amplitude Balance:  $\pm 0.6$  dB Max.  
 Isolation: 18 dB Min.

### Mechanical Specifications:

Type: Drop-In  
 Plating Options: QH10900-Ag: Immersion Silver (RoHS)  
 Size: 1.3 x 1.3 x 0.15"

### Port Configurations:

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

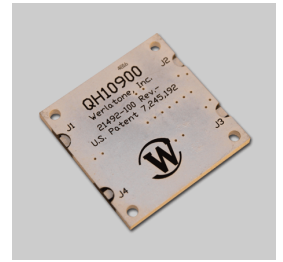
Unit can be ordered with or without Solder Tabs. Add "-T" after plating code for Tabbed unit.

See 90° Drop-In Application Note for more information.

**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.

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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

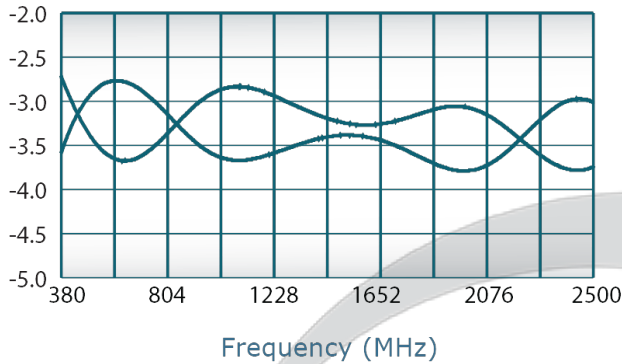


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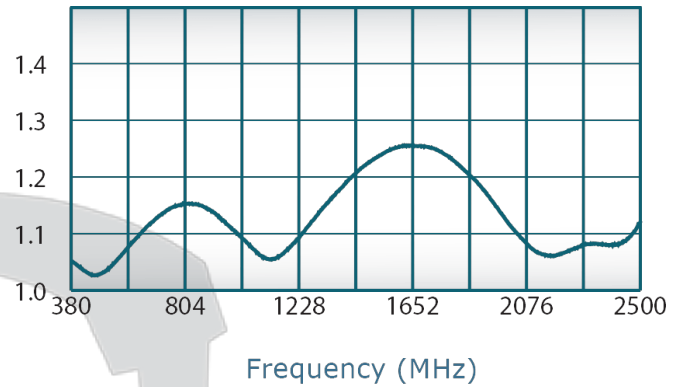
QH10900

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

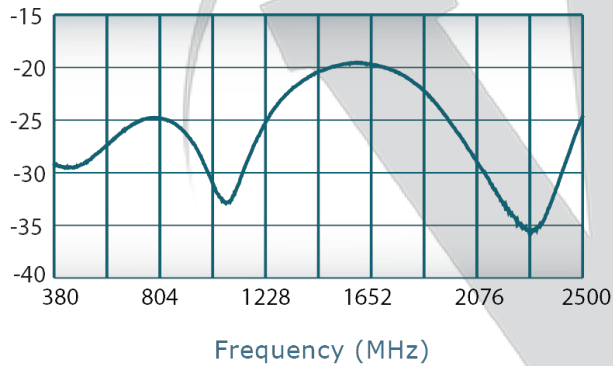
Coupling:



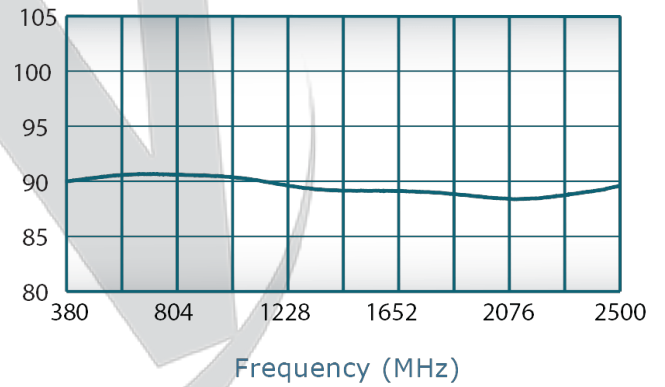
VSWR:



Isolation:



Phase Balance:



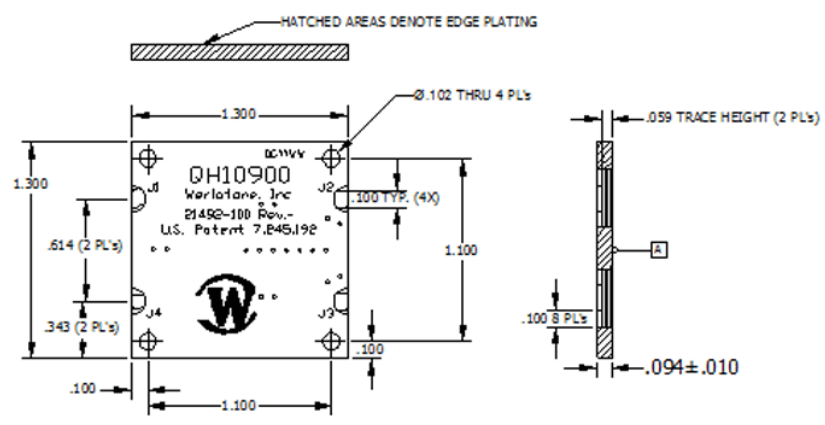
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REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
10/27/2016	-	INITIAL RELEASE	GP	CS	BW



- NOTES: UNLESS OTHERWISE SPECIFIED**
1. MOUNT COUPLER WITH SURFACE "A" CONTACTING ADEQUATE HEATSINK.
  2. STRIPLINE COUPLER HAS 4 EXPOSED COPPER PADS. PCB SHOULD HAVE A CUTOUT TO ACCOMMODATE PART. ALIGN 50° LANDS WITH PAD AND MAKE SOLDER JOINT WITH LEAD (NOT SUPPLIED).
  3. Surface Finish: Immersion Silver (RoHS)

UNLESS OTHERWISE SPECIFIED		DATE	DATE	<b>WERLATONE SINCE 1965</b> 17 Jon Barrett Road Patterson, NY 12563
<ul style="list-style-type: none"> <li>• INTERPRET DRAWING TO THE 1994-2000</li> <li>• DIMENSIONS FOR ASSEMBLY VIA 50-2005</li> <li>• DIMENSIONAL TOLERANCES FOR REF ONLY</li> <li>• DIMENSIONS ARE IN INCHES</li> <li>• DIMENSIONAL DIMENSIONS APPLY BEFORE FINISHES</li> <li>• TOLERANCES: ANGLE = 1°</li> <li>  3 PL. DIMALS = .005</li> <li>  2 PL. DIMALS = .01</li> </ul>	GP CSK DRG QA RLS	10/27/2016     	DATE     	
THIRD ANGLE PROJECTION		SIZE <b>A</b>	CAGE CODE <b>28812</b>	DWG NO <b>21492-500</b>
		SCALE <b>1:1</b>	SHEET 1 OF 1	

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