

## PRODUCT DATA SHEET

QH7949

### 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: 500 - 1000 MHz  
Power: 500 W CW  
Insertion Loss: 0.15 dB Max.  
VSWR: 1.25:1 Max.  
Phase Balance:  $\pm 5^\circ$  dB Max.  
Amplitude Balance:  $\pm 0.55$  dB Max.  
Isolation: 20 dB Min.

### Mechanical Specifications:

Type: Surface Mount  
Plating Options: QH7900-Pb: Electrodeposited Tin/Lead  
Size: 2.5 x 0.75 x 0.27"

### Port Configurations:

<b>J1</b>	<b>J2</b>	<b>J3</b>	<b>J4</b>
Sum Port	90° Port	0° Port	Isolated Port

**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.

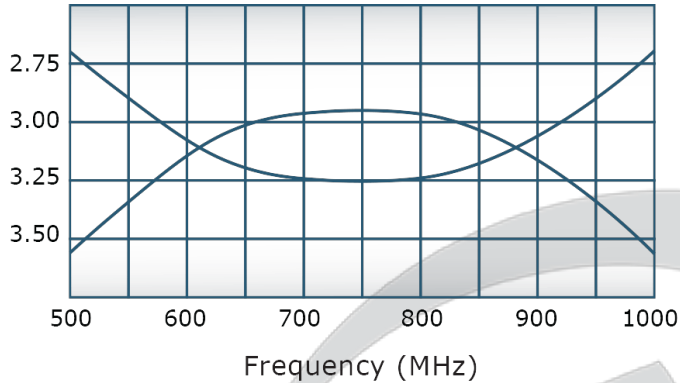


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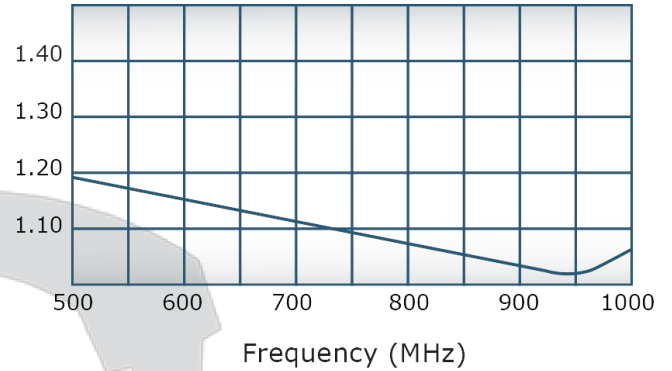
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### Performance Data (Specifications subject to change without notice):

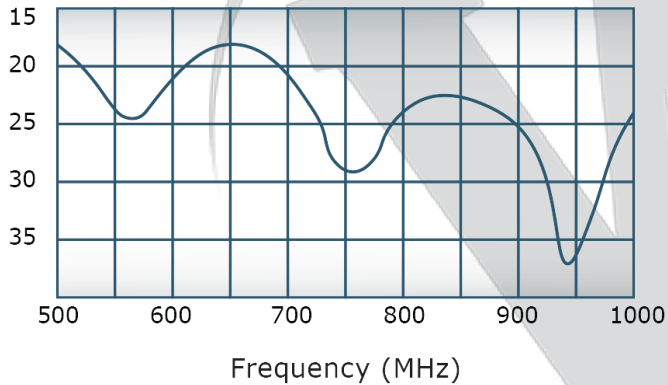
Coupling:



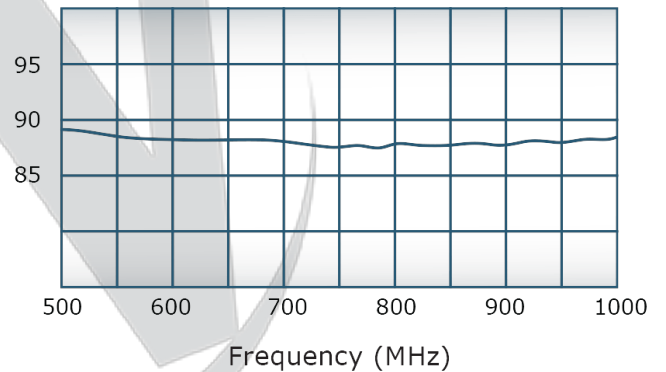
VSWR:



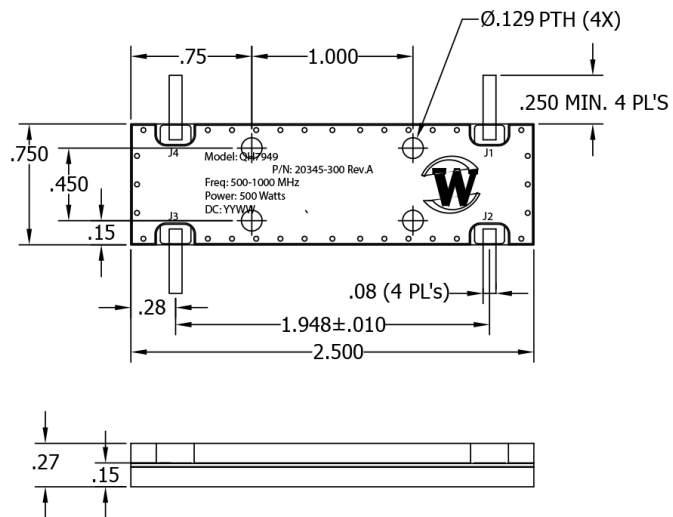
Isolation:




Phase Balance:



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REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	5/21/2007	BW
A	ECN 9492	1/18/2018	BW

UNLESS OTHERWISE SPECIFIED		DWN	DATE	<div><div>W</div><div>WERLATONE   SINCE 1965</div></div>		17 Jon Barrett Rd Patterson, NY 12563	
<ul style="list-style-type: none"><li>• INTERPRET DRAWING IAW MIL-STD-100</li><li>• DIMENSIONING PER ASME Y14.5M-2009</li><li>• PARENTHETICAL INFO FOR REF ONLY</li><li>• DIMENSIONS ARE IN INCHES</li><li>• DIMENSIONAL LIMITS APPLY BEFORE PROCESSES</li><li>• TOLERANCES: ANGLES ± 2- 3 PL ± .005 2 PL ± .015</li></ul>		GP	5/21/2007				
		CHK	DATE	TITLE			
		CS	5/21/2007				
		ENGR	DATE				
		MFGR	DATE				
THIRD ANGLE PROJECTION 		QA	DATE	SIZE	CAGE CODE	DWG NO	REV
		RLSE	DATE	A	28812	20345-500	A
		SCALE		1:1	SHEET 1 OF 1		

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