



## 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:                ± 5° dB Max.  
 Amplitude Balance:         ± 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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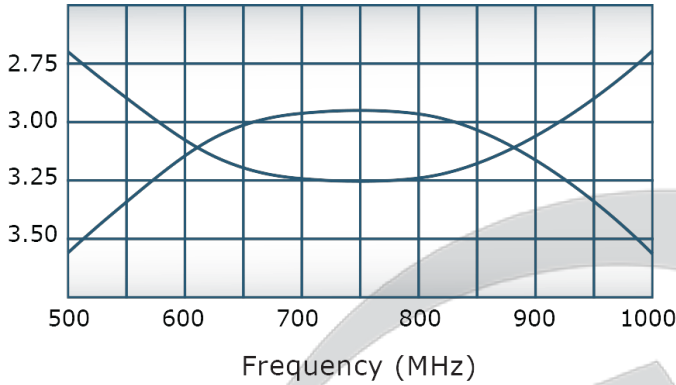
Werlatone, Inc.

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

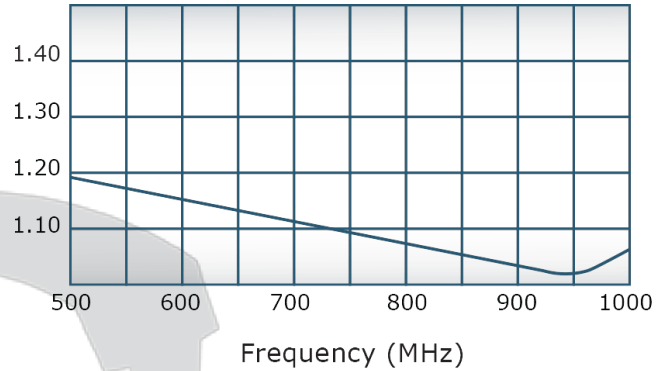


## Performance Data (Specifications subject to change without notice):

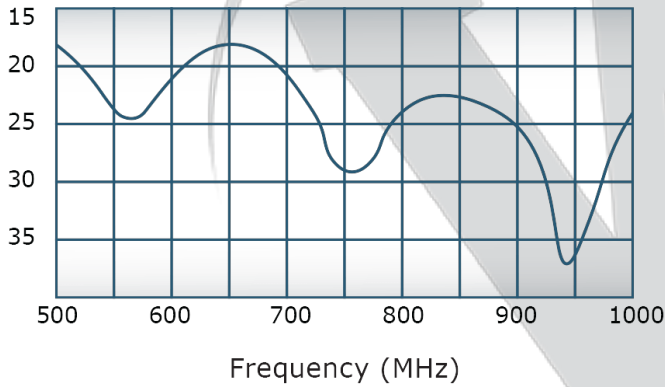
Coupling:



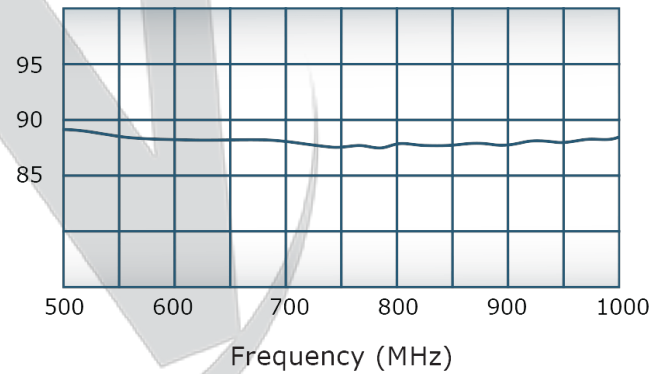
VSWR:



Isolation:



Phase Balance:



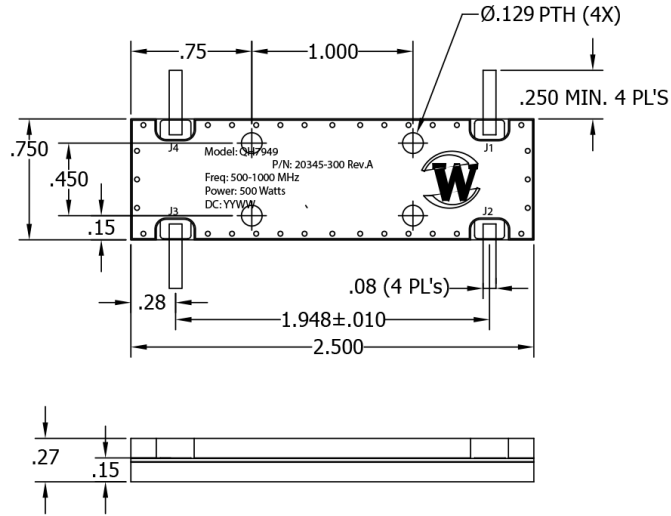
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REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	5/21/2007	BW
A	ECN 9492	1/18/2018	BW



<small>UNLESS OTHERWISE SPECIFIED</small> • INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100 • DIMENSIONING PER ASME Y14.5M-2009 • PARENTHESES ARE FOR REFERENCE ONLY • DIMENSIONS ARE IN INCHES • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES • TOLERANCES: ANGLES ± 2° 3 PL ± .005 2 PL ± .015 THIRD ANGLE PROJECTION	DWN	DATE	<b>WERLATONE   SINCE 1965</b>	17 Jon Barrett Rd Patterson, NY 12563	
	GP	5/21/2007			
	CHK	DATE	TITLE		
	CS	5/21/2007			
	ENGR	DATE			
MFGR	DATE	SIZE: <b>A</b> CAGE CODE: <b>28812</b> DWG NO: <b>20345-500</b> REV: <b>A</b>			
QA	DATE				
RLSE	DATE				
SCALE: <b>1:1</b>		SHEET 1 OF 1			

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