


**PRODUCT DATA SHEET**
**QH8100**
**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:	100 - 512 MHz
Power:	250 W CW
Insertion Loss	0.45 dB Max.
VSWR:	1.30:1 Max.
Phase Balance:	90° ± 5° dB Max.
Amplitude Balance:	± 0.5 dB Max.
Isolation:	20 dB Min.

**Mechanical Specifications:**

Type:	Surface Mount
Plating Options:	QH8100-Pb: Electrodeposited Tin/Lead QH8100-Sn: Immersion Tin (RoHS Compliant) QH8100-Ag: Immersion Silver (RoHS Compliant) QH8100-Au (ENIG)
Weight:	1.6 oz.
Size:	3.3 x 1.52 x 0.279"

**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.

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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

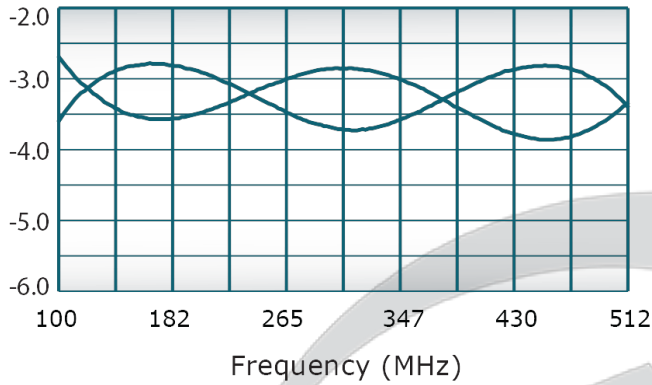


PRODUCT DATA SHEET

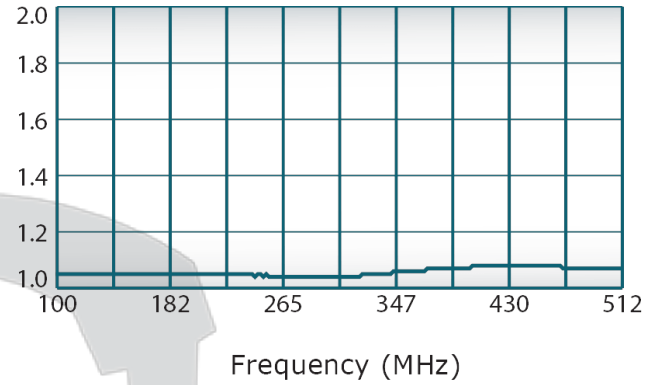
QH8100

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

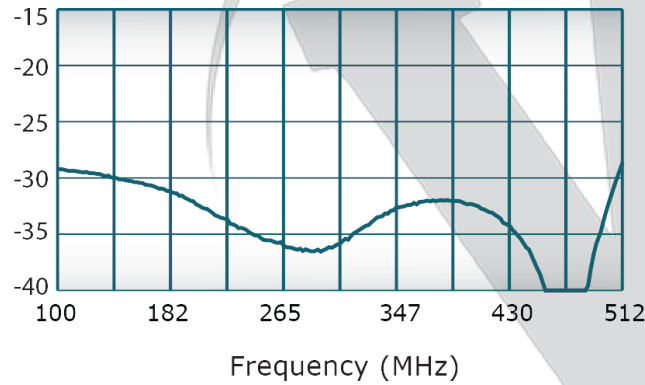
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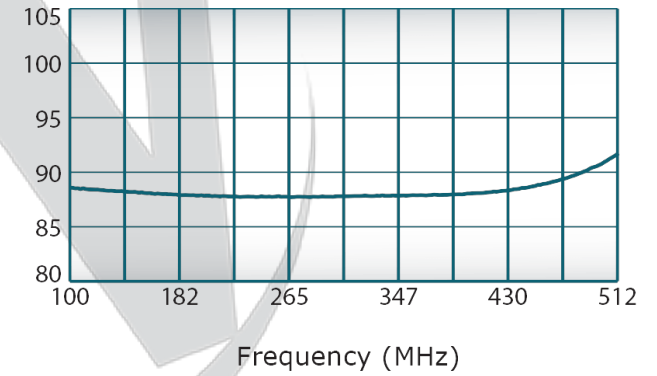
VSWR:



Isolation:



Phase Balance:



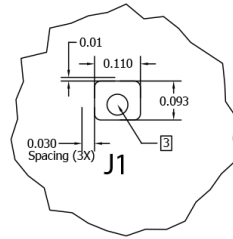
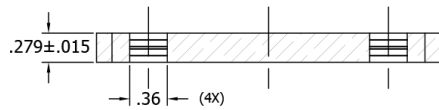
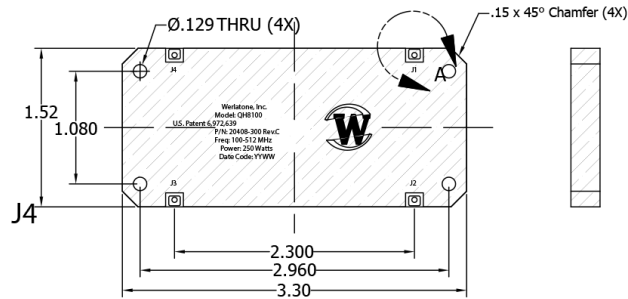
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REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	2/14/2008	BW
A	ECN 4444	3/18/2008	BW
B	ECN 4925	7/1/2009	BW
C	ECN 5259	11/18/2010	BW



DETAIL A (4X)  
SCALE 4:1

UNLESS OTHERWISE SPECIFIED		OWN	DATE	<b>WERLATONE</b>   SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IN ACCORDANCE WITH ASME Y14.5M-2009 DIMENSIONING PER ASME Y14.5M-2009 PARENTHESES ARE FOR REF ONLY DIMENSIONS ARE IN INCHES DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		CP	11/19/10	
TOLERANCES: ANGLES ± .2 3 PL ± .005 2 PL ± .015		CHK	DATE	TITLE
THIRD ANGLE PROJECTION		NH	11/19/10	
		ENGR	DATE	SIZE CAGE CODE DWG NO <b>B 28812 20408-500</b>
		BW	11/19/10	
		MFR	DATE	REV
		QA	DATE	
		RELEASE	DATE	SCALE
		CP	11/19/10	1:1
				SHEET 1 OF 1

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