



## PRODUCT DATA SHEET

QH7862

### 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: 450 - 2500 MHz  
 Power: 125 W CW  
 Insertion Loss: 0.5 dB Max.  
 VSWR: 1.30:1 Max.  
 Phase Balance: 90° ± 5° dB Max.  
 Amplitude Balance: ± 0.45 dB Max.  
 Isolation: 18 dB Min.

### Mechanical Specifications:

Type: Surface Mount  
 Plating Options: QH7862-Pb: Electrodeposited Tin/Lead  
 QH7862-Sn: Immersion Tin (RoHS Compliant)  
 QH7862-Ag: Immersion Silver (RoHS Compliant)  
 QH7862-Au (ENIG)  
 Weight: 6 grams  
 Size: 1.5 x 1.1 x 0.095"

### 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

**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.

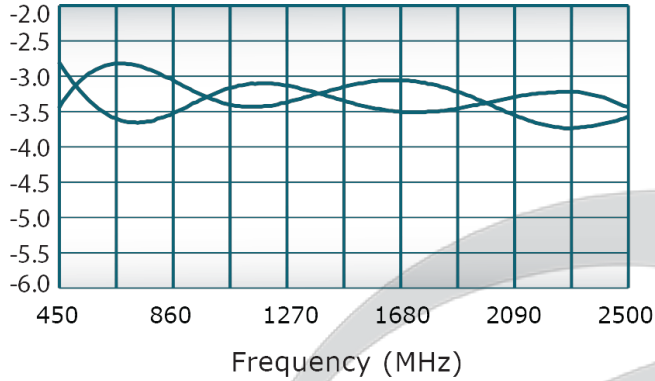
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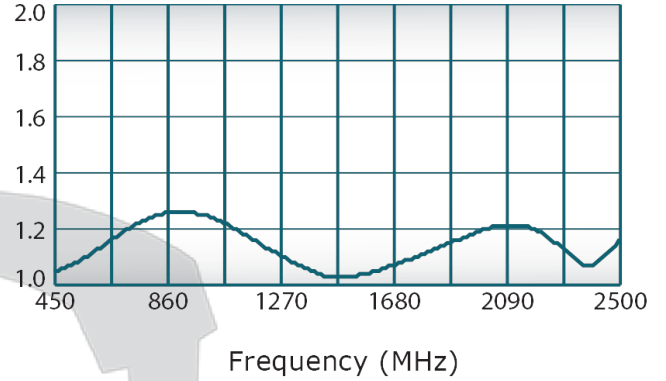


## Performance Data (Specifications subject to change without notice):

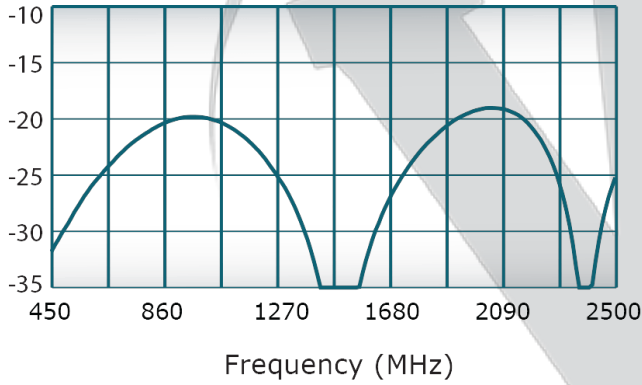
Coupling:



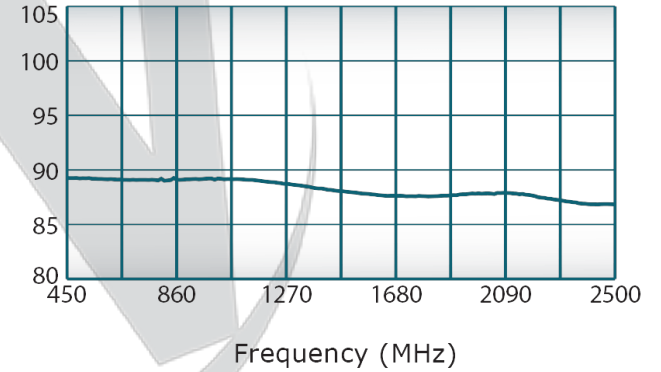
VSWR:



Isolation:



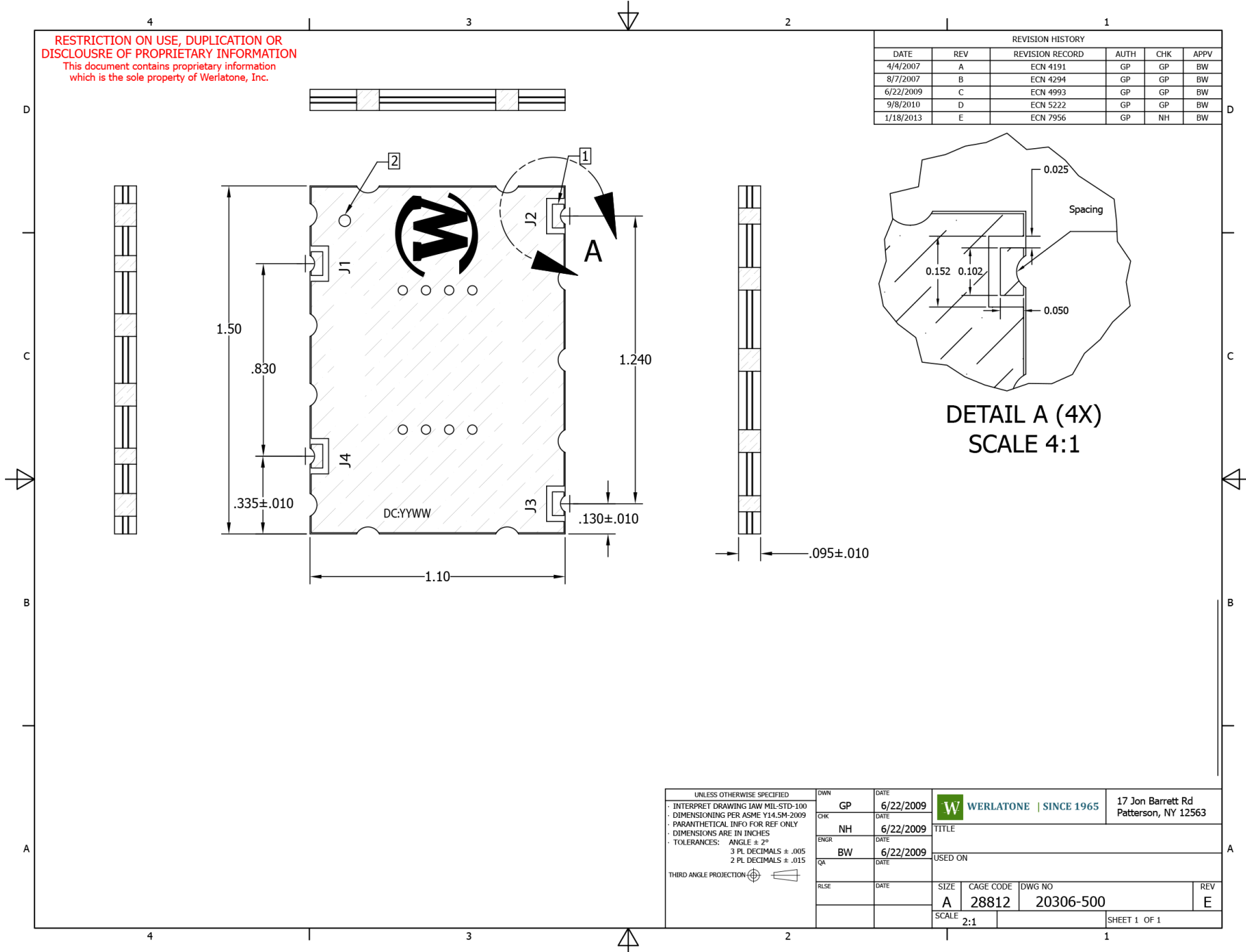
Phase Balance:



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REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
4/4/2007	A	ECN 4191	GP	GP	BW
8/7/2007	B	ECN 4294	GP	GP	BW
6/22/2009	C	ECN 4993	GP	GP	BW
9/8/2010	D	ECN 5222	GP	GP	BW
1/18/2013	E	ECN 7956	GP	NH	BW

**DETAIL A (4X)**  
**SCALE 4:1**

UNLESS OTHERWISE SPECIFIED		DWN	GP	DATE	6/22/2009	<b>WERLATONE   SINCE 1965</b>	17 Jon Barrett Rd Patterson, NY 12563	
INTERPRET DRAWING IAW MIL-STD-100 DIMENSIONING PER ASME Y14.5M-2009 PARANTHETICAL INFO FOR REF ONLY DIMENSIONS ARE IN INCHES TOLERANCES: ANGLE ± 2° 3 PL DECIMALS ± .005 2 PL DECIMALS ± .015		CHK	NH	DATE	6/22/2009		TITLE	
THIRD ANGLE PROJECTION		ENGR	BW	DATE	6/22/2009	USED ON		
		QA		DATE		SIZE	CAGE CODE	DWG NO
		RLSE		DATE		A	28812	20306-500
						SCALE		REV
						2:1		E
						SHEET 1 OF 1		

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