

**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:**

<b>J1</b>	<b>J2</b>	<b>J3</b>	<b>J4</b>
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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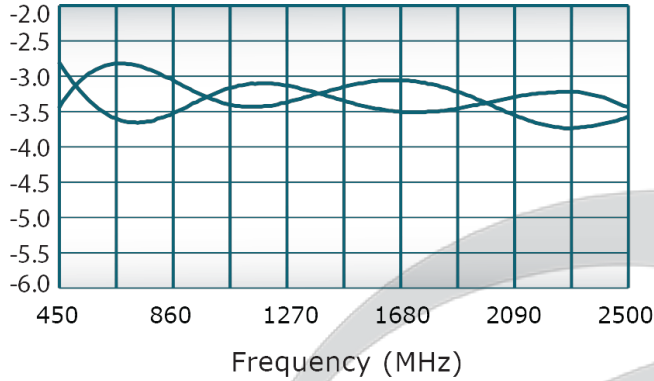


## PRODUCT DATA SHEET

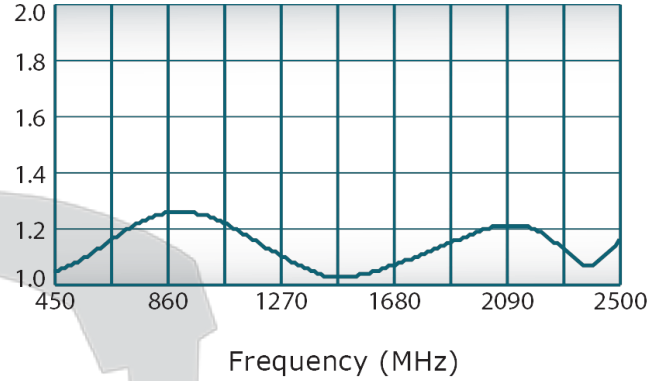
QH7862

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

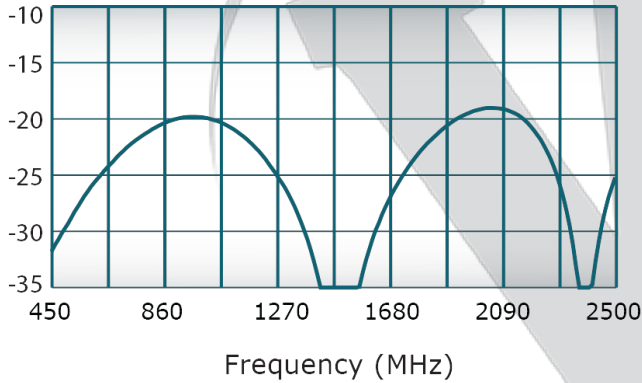
Coupling:



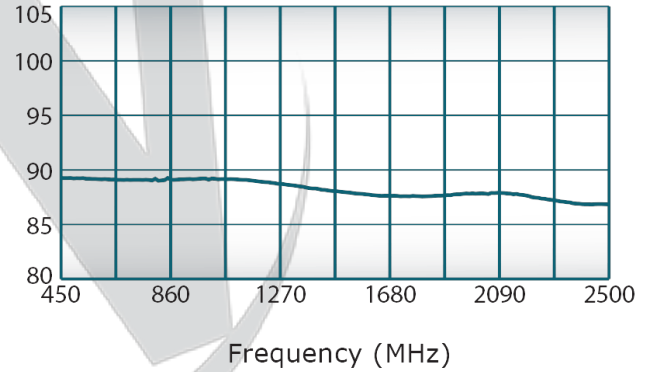
VSWR:



Isolation:



Phase Balance:

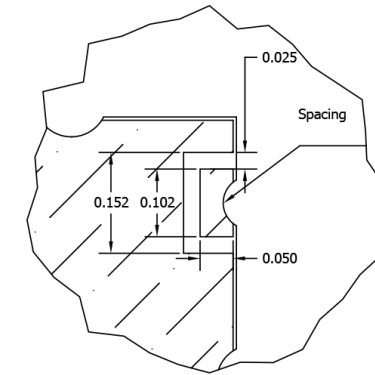


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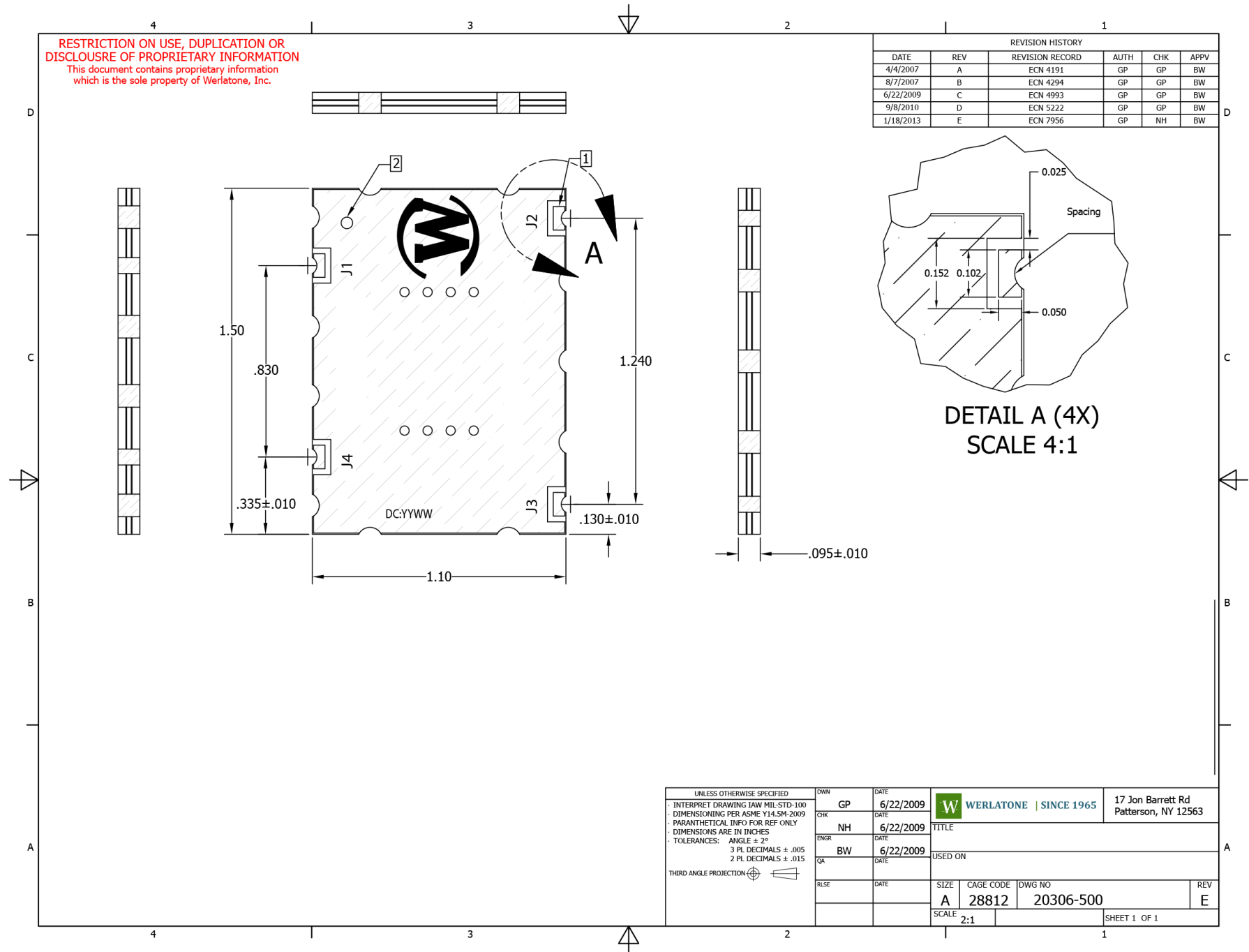
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REVISION HISTORY						
DATE	REV	REVISION RECORD	AUTH	CHK	APPV	
4/4/2007	A	ECN 4191	GP	GP	BW	
8/7/2007	B	ECN 4294	GP	GP	BW	
6/22/2009	C	ECN 4993	GP	GP	BW	
9/8/2010	D	ECN 5222	GP	GP	BW	
1/18/2013	E	ECN 7956	GP	NH	BW	



DETAIL A (4X)  
SCALE 4:1



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