



## 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:  $90^\circ \pm 5^\circ$  dB Max.  
 Amplitude Balance:  $\pm 0.5$  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

Model QH8100

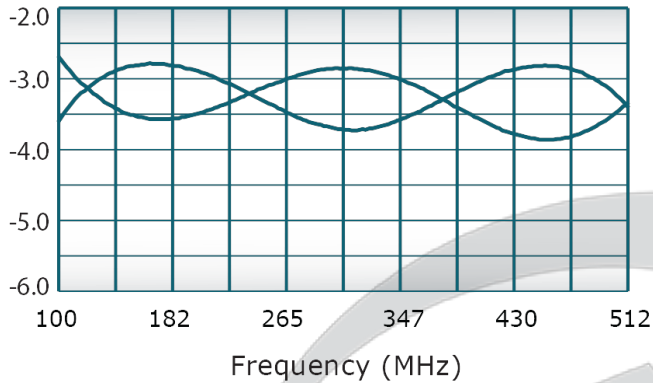


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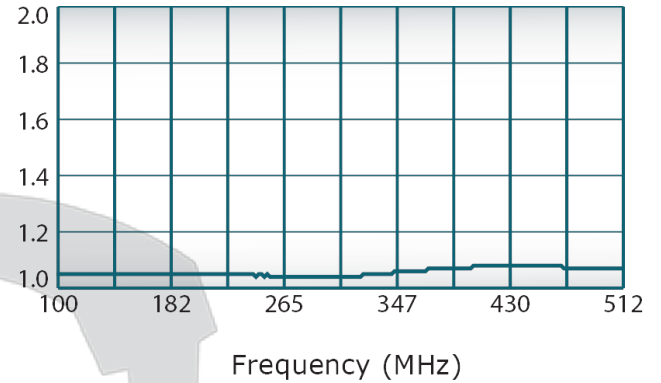
QH8100

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

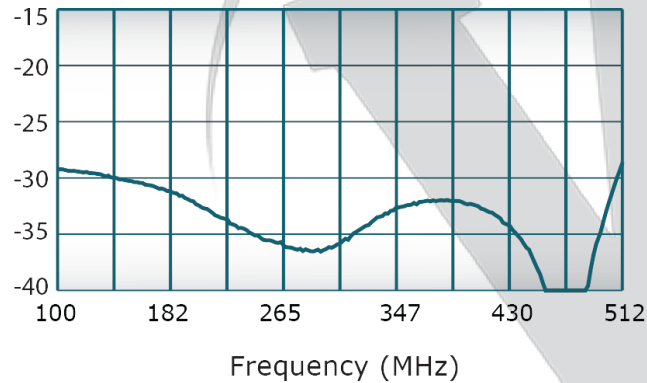
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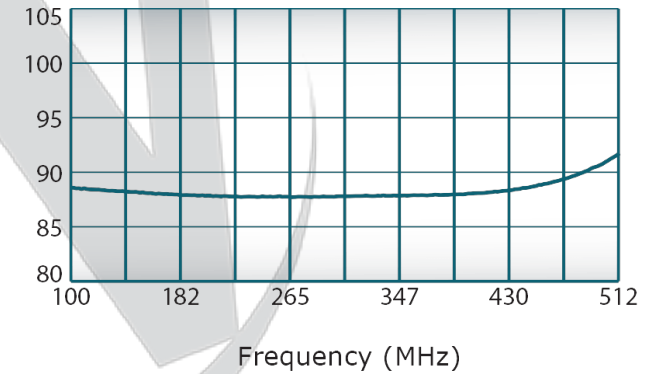
VSWR:



Isolation:

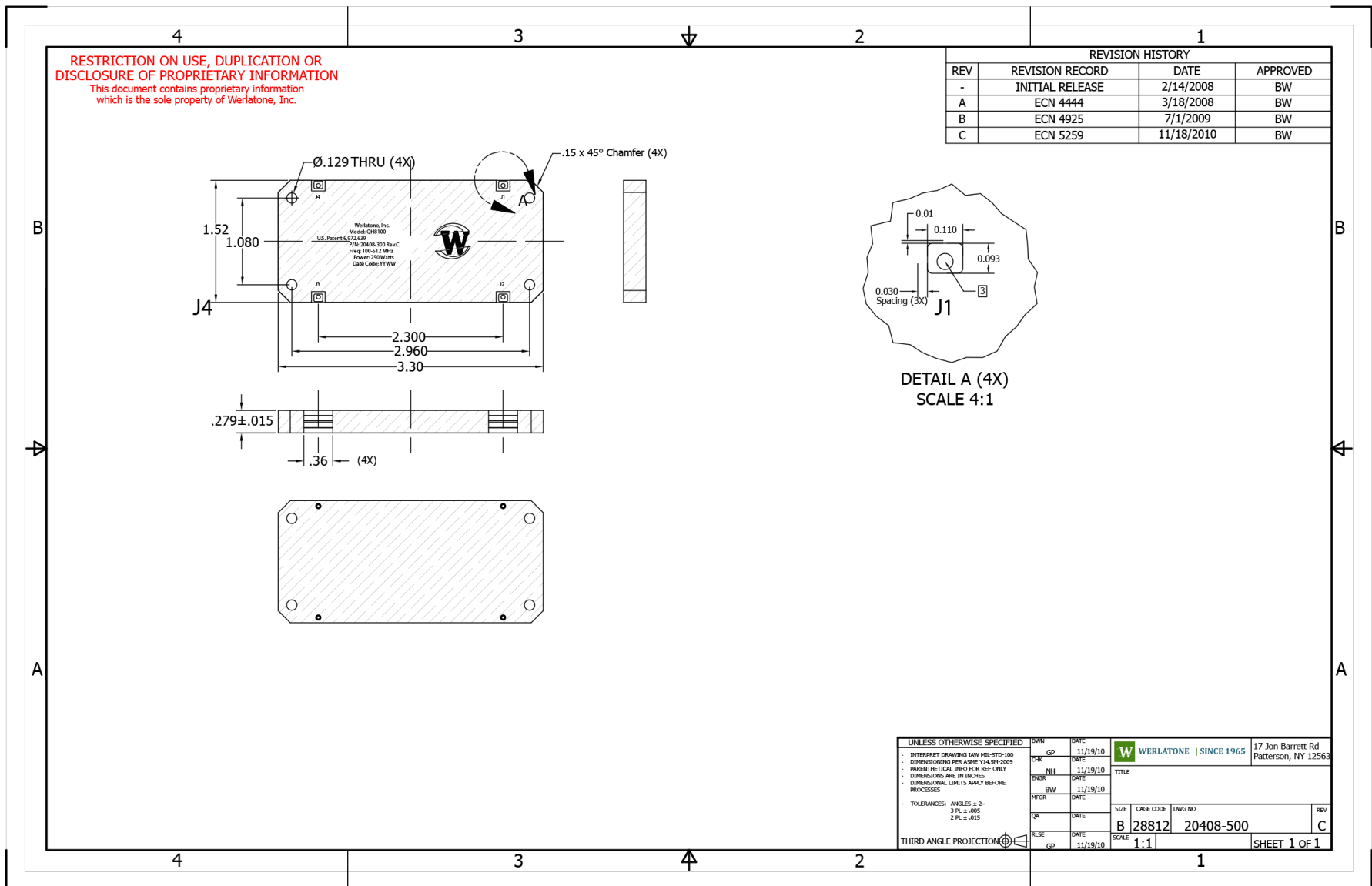


Phase Balance:



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