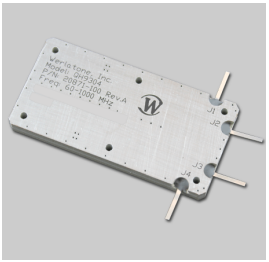
WERLATONE

Model QH9304



PRODUCT DATA SHEET **QH9304**

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:	60 - 1000 MHz
Power:	150 W CW
Insertion Loss:	1.0 dB Max.
VSWR:	1.40:1 Max.
Phase Balance:	90° ± 6° dB Max.
Amplitude Balance:	± 1.0 dB Max.
Isolation:	18 dB Min.

Mechanical Specifications:

Type:	Surface Mount
Plating Options:	QH9304-Pb: Electrodeposited Tin/Lead QH9304-Ag: Immersion Silver (RoHS Compliant) QH9304-Au (ENIG)
Weight:	1.7 oz.
Size:	2.0 x 1.0 x 0.16''

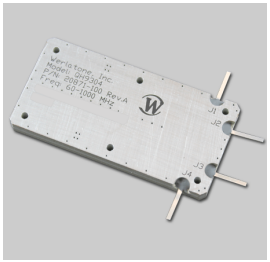
Port Configurations:

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.

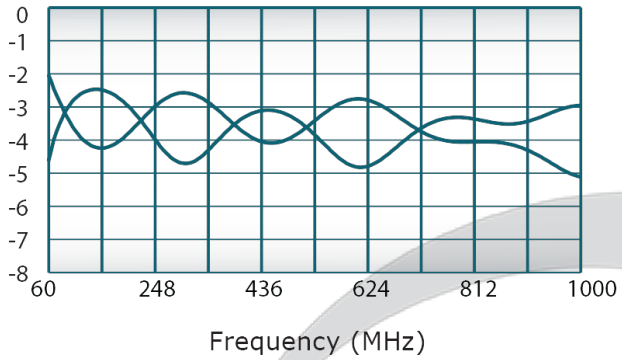
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

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

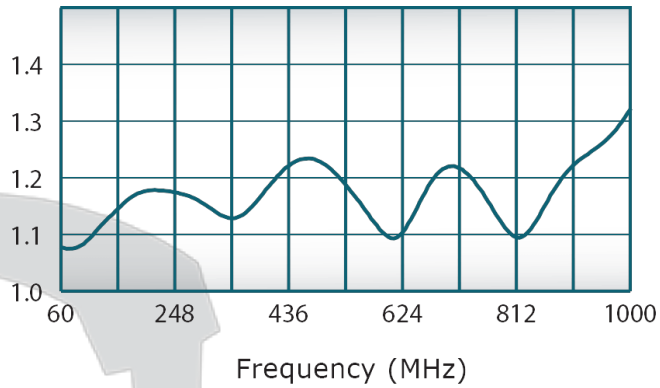


Performance Data (Specifications subject to change without notice):

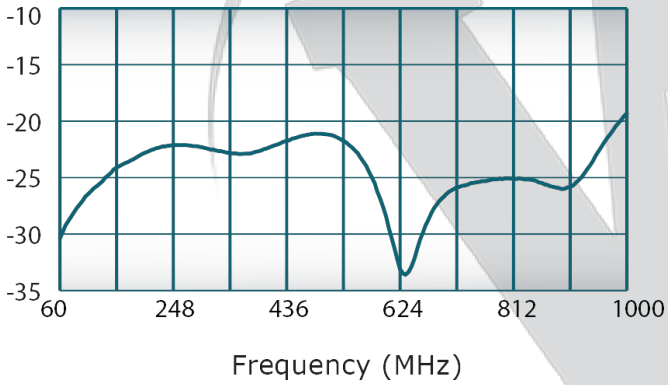
Coupling:



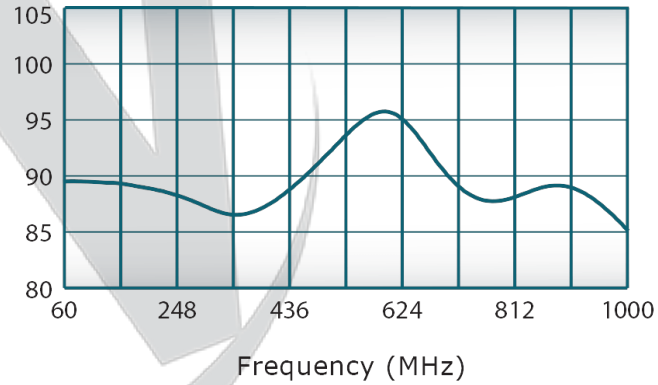
VSWR:



Isolation:



Phase Balance:

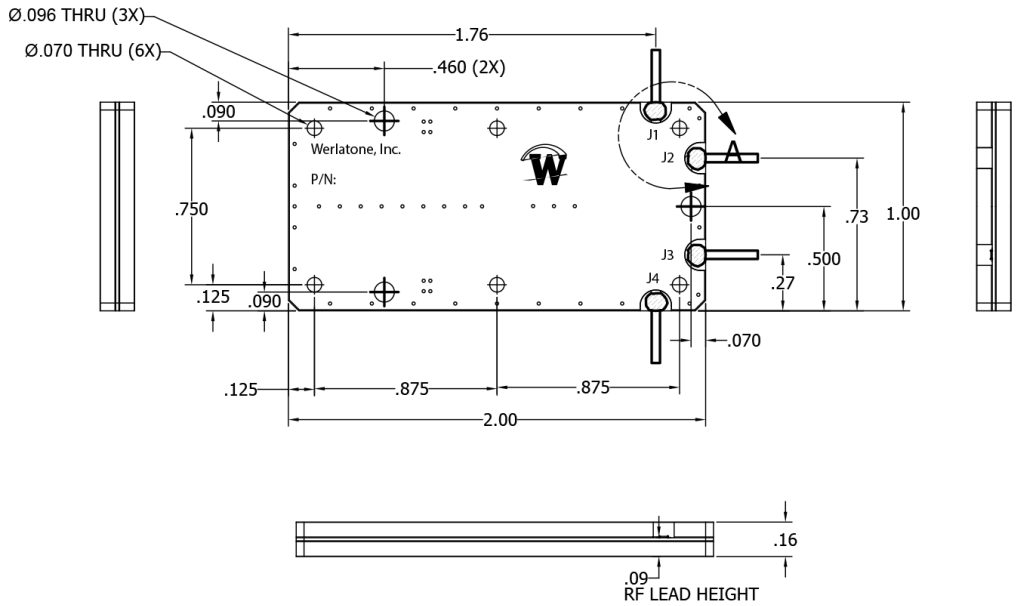


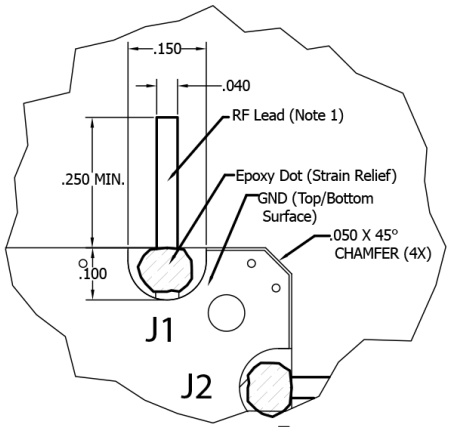
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION

This document contains proprietary information which is the sole property of Werlatone, Inc.

REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	INITIAL-RELEASE	5/15/2012	BW
A	ECN 8967	11/13/2015	BW





DETAIL A (4X)
SCALE 5:1

UNLESS OTHERWISE SPECIFIED	DWN GP	DATE 5/15/12	WERLATONE | SINCE 1965 — 17 Jon Barrett Rd Patterson, NY 12563
· INTERPRET DRAWING IAW MIL-STD-100	CHK CS	DATE 5/15/12	TITLE
· DIMENSIONING PER ASME Y14.5M-2009	ENGR GP	DATE 5/15/12	
· PARENTHETICAL INFO FOR REF ONLY	MFGR	DATE	SIZE B | CAGE CODE 28812 | DWG NO 20871-500 | REV A
· DIMENSIONS ARE IN INCHES	QA	DATE	
· DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	RLSE	DATE	
· TOLERANCES: ANGLES ± 2- 3 PL ± .010 2 PL ± .015			SCALE 2:1 | SHEET 1 OF 1
· HOLE SIZE TOLERANCES ±.004			
THIRD ANGLE PROJECTION			

Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of 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