WERLATONE

Model QH8100
90° Hybrids Surface Mount (SMT) & Drop

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

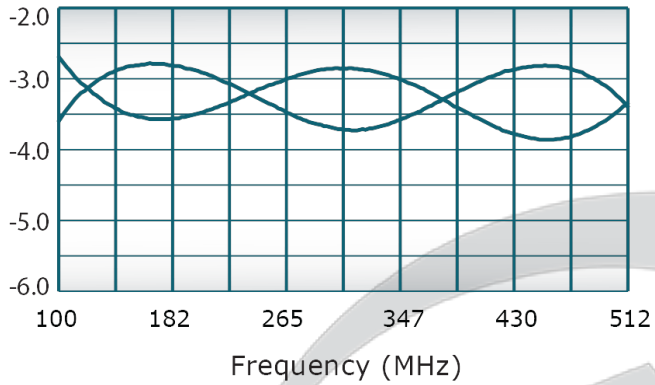
Werlatone's breakthrough technology allows us to build our existing line of Broadband 3 dB High Power 90° Hybrid Couplers. Connectorized 3 dB 90° Hybrid Coupler models are available with a choice of connectors. Several of our existing High Power 3 dB 90° RF Couplers are three port designs, wherein the difference port is internally terminated with a high power termination. This eliminates the need for a customer supplied external load for each Hybrid Coupler.

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

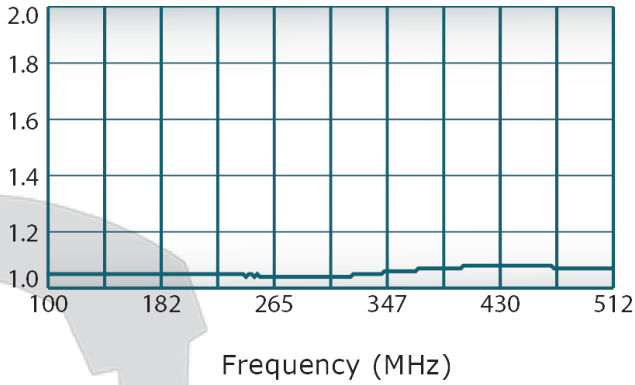
Werlatone, Inc.All Rights Reserved

Performance Data (Specifications subject to change without notice):

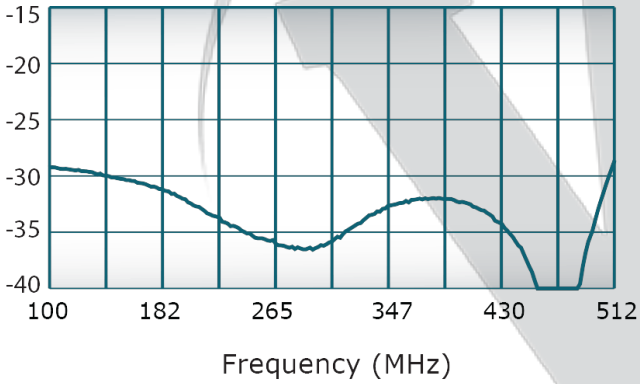
Coupling:



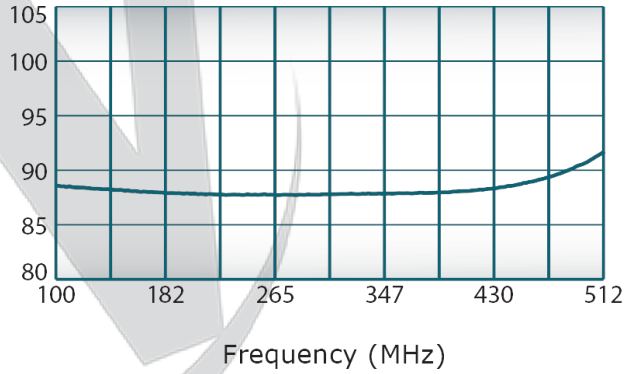
VSWR:



Isolation:



Phase Balance:

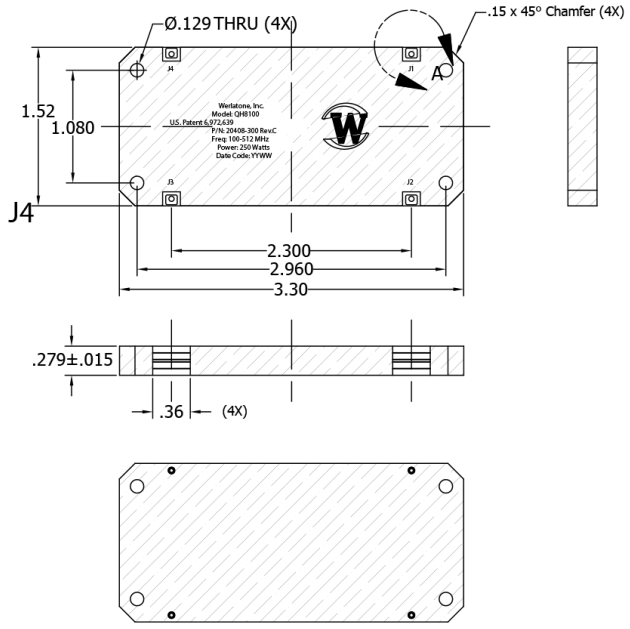


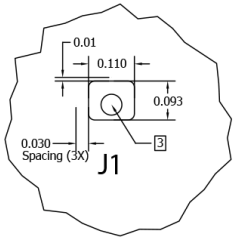
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

Werlatone, Inc.All Rights Reserved

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	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					
· INTERPRET DRAWING IAW MIL-STD-100 · DIMENSIONING PER ASME Y14.5M-2009 · PARENTHETICAL INFO FOR REF ONLY · DIMENSIONS ARE IN INCHES · DIMENSIONAL LIMITS APPLY BEFORE PROCESSES · TOLERANCES: ANGLES ± 2° 3 PL ± .005 2 PL ± .015	DWN	GP	11/19/10	WERLATONE | SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563
	CHK	NH	11/19/10	TITLE	
	ENGR	BW	11/19/10		
	MFGR		DATE	SIZE / CAGE CODE / DWG NO / REV	
	QA		DATE	B / 28812 / 20408-500 / C	
THIRD ANGLE PROJECTION	RLSE	GP	11/19/10	SCALE 1:1	SHEET 1 OF 1

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