
PRODUCT DATA SHEET
QH8193
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:	2000 - 6000 MHz
Power:	100 W CW
Insertion Loss	0.25 dB Max.
VSWR:	1.30:1 Max.
Phase Balance:	± 5° dB Max.
Amplitude Balance:	2.0 GHz: ± 0.9 dB Max. 4.0 GHz: ± 0.75 dB Max. 6.0 GHz: ± 0.75 dB Max.
Isolation:	20 dB Min.

Mechanical Specifications:

Type:	Surface Mount
Plating Options:	QH8193-Sn: Immersion Tin (RoHS) QH8193-Ag: Immersion Silver (RoHS) QH8193-Au: ENIG (RoHS) QH8193-Pb: Electrodeposited Tin/Lead
Size:	0.85 x 0.33 x 0.14"
Weight:	1.5 grams

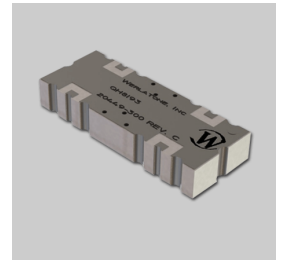
Port Configurations:

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.

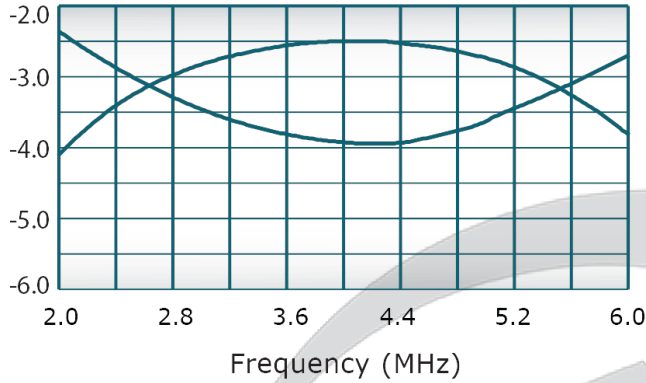
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

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

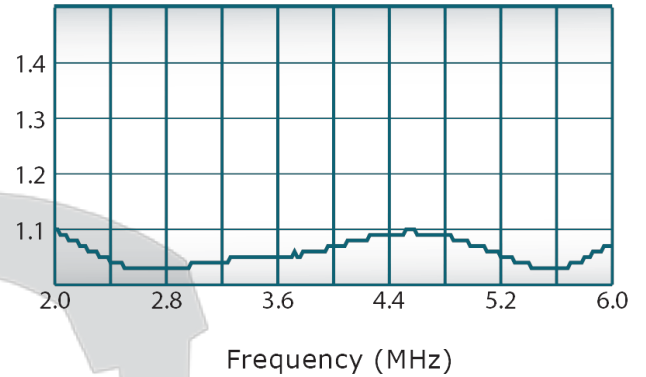


Performance Data (Specifications subject to change without notice):

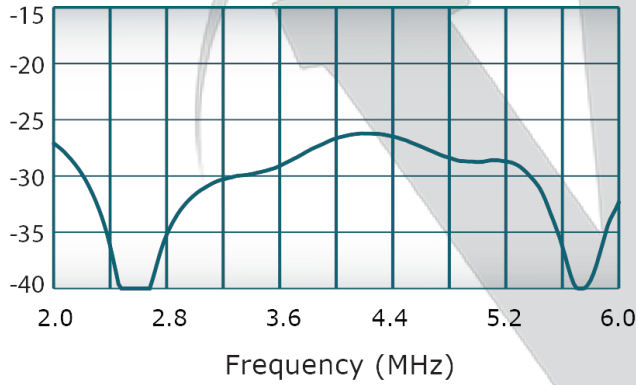
Coupling:



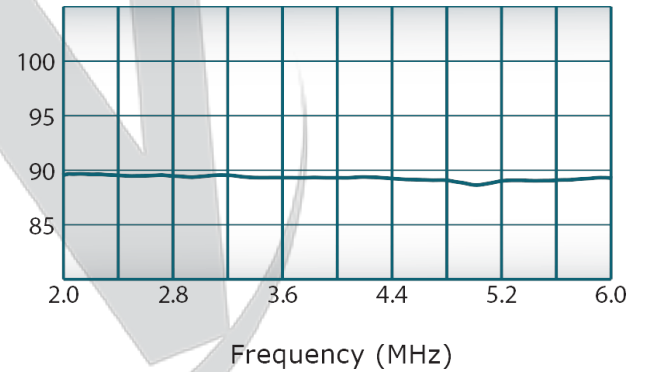
VSWR:



Isolation:



Phase Balance:



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

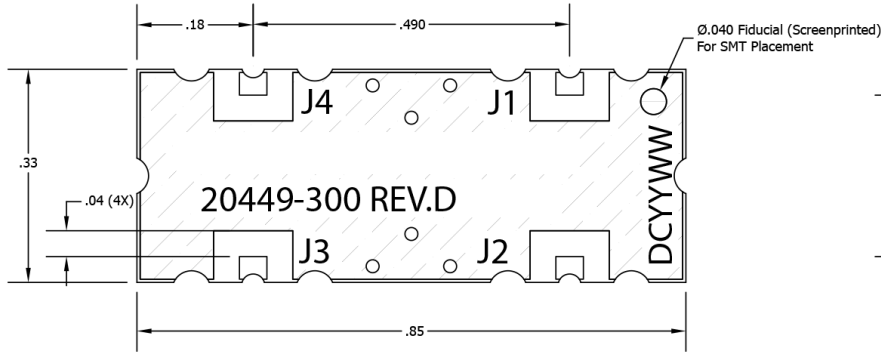
Werlatone, Inc.

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

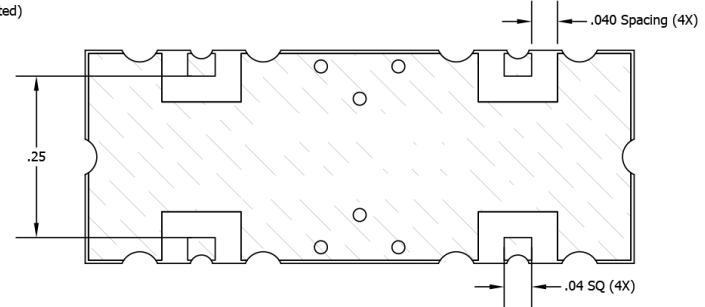
RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION
 This document contains proprietary information which is the sole property of Werlatone, Inc.

DATE	SYM	REVISION RECORD	AUTH	DR	CK
7/23/2008	A	ECN 4567	GP	GP	NH
8/26/2008	B	ECN 4595	GP	GP	NH
5/7/2009	C	ECN 4882	GP	GP	NH
11/3/2009	D	ECN 5000	CS	CS	TC
6/23/2015	E	ECN 8845	GP	GP	BW

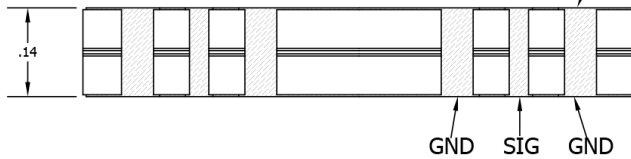
Top View



Bottom View



Hatched Areas Denotes Metallization



UNLESS OTHERWISE SPECIFIED		DWN	GP	DATE	6/12/08	WERLATONE SINCE 1965	2095 Route 22 Brewster, NY 10509						
<ul style="list-style-type: none"> ● 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	5/7/09			TITLE					
THIRD ANGLE PROJECTION		ENGR	BW	DATE	5/7/09	USED ON							
		QA		DATE		SIZE	A	CAGE CODE	28812	DWG NO	20449-500	REV	E
		RLSE		DATE		SCALE	4:1			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