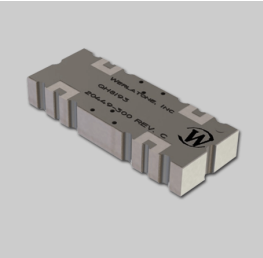
WERLATONE

Model QH8193
90° Hybrids Surface Mount (SMT) & Drop



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.o GHz: ± 0.9 dB Max.
	4.o GHz: ± 0.75 dB Max.
	6.o 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.

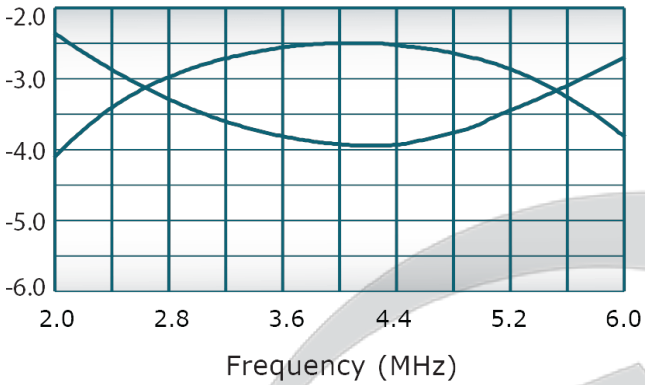
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Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

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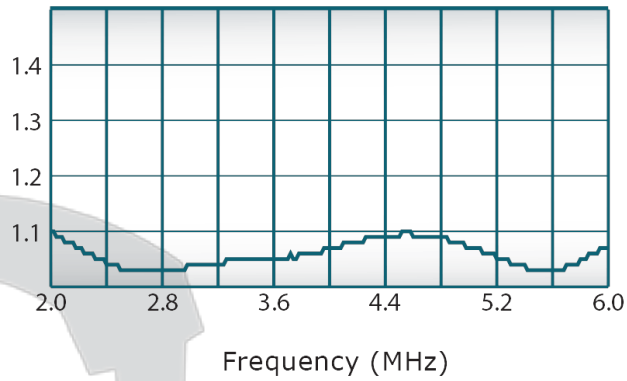


Performance Data (Specifications subject to change without notice):

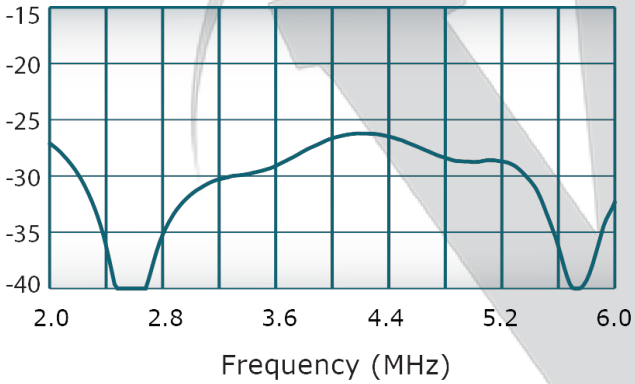
Coupling:



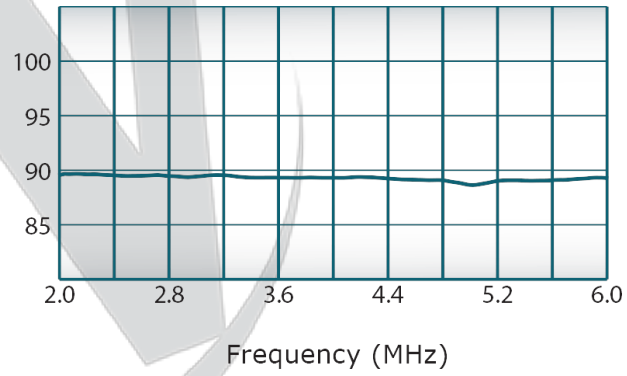
VSWR:



Isolation:



Phase Balance:

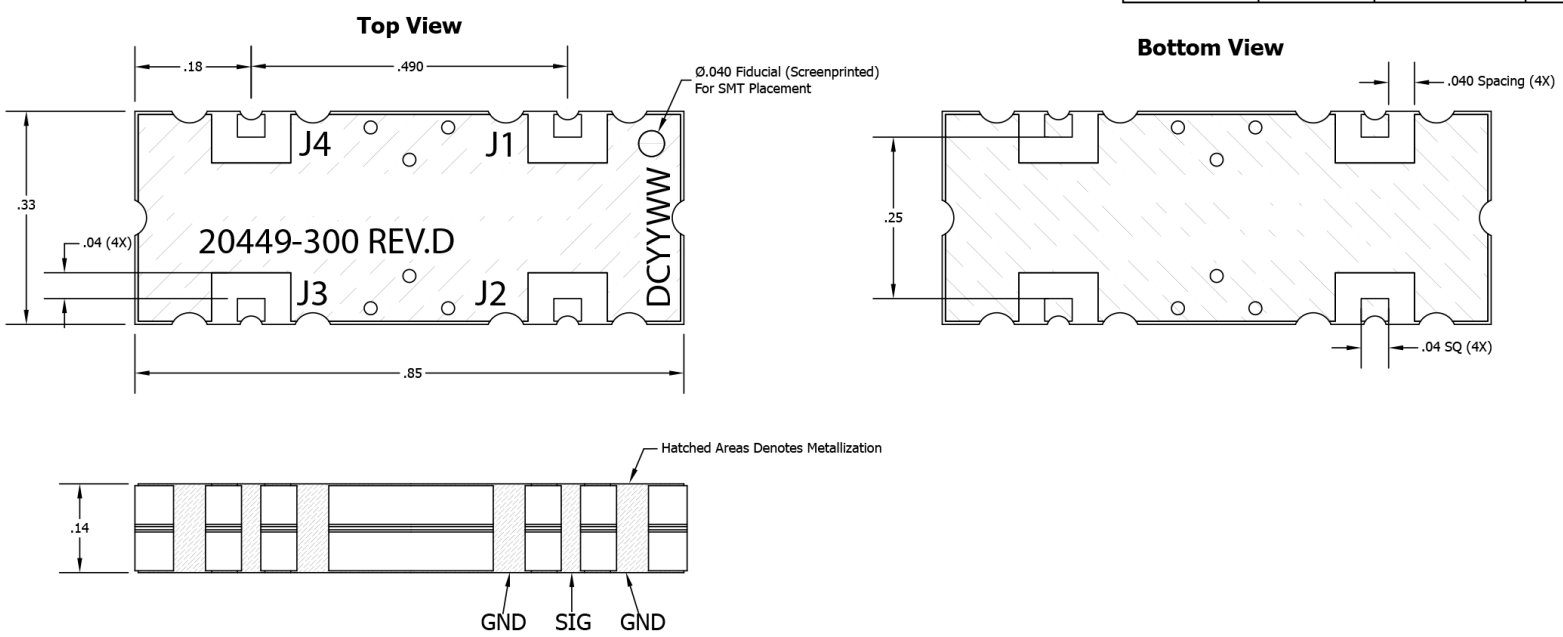


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DATE	SYM	REVISION RECORD	AUTH	DR	CK
7/23/2008	A	ECN 4567	GP	GP	NH
8/26/2008	B	ECN 4595	GP	GP	NH
5/7/2009	C	ECN 4882	GP	GP	NH
11/3/2009	D	ECN 5000	CS	CS	TC
6/23/2015	E	ECN 8845	GP	GP	BW



UNLESS OTHERWISE SPECIFIED
- 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

THIRD ANGLE PROJECTION

DWN	GP	DATE 6/12/08
CHK	NH	DATE 5/7/09
ENGR	BW	DATE 5/7/09
QA		DATE
RLSE		DATE

WERLATONE | SINCE 1965
2095 Route 22
Brewster, NY 10509

TITLE

USED ON

SIZE	CAGE CODE	DWG NO	REV
A	28812	20449-500	E

SCALE 4:1 SHEET 1 OF 1

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