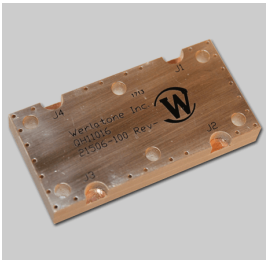
WERLATONE

Model QH11016
90° Hybrids Surface Mount (SMT) & Drop



PRODUCT DATA SHEET **QH11016**

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:	950 - 1850 MHz
Power:	500 W CW
Insertion Loss	0.2 dB Max.
VSWR:	1.25:1 Max.
Phase Balance:	± 5° dB Max.
Amplitude Balance:	± 0.5 dB Max.
Isolation:	19 dB Min.

Mechanical Specifications:

Type:	Drop-In
Plating Options:	QH11016-Ag: Immersion Silver (RoHS)
Size:	2.0 x 1.0 x 0.28"

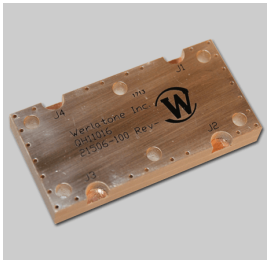
Port Configurations:

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

Unit can be ordered with or without Solder Tabs. Add "-T" after plating code for Tabbed unit. See 90° Drop-In Application Note for more information.

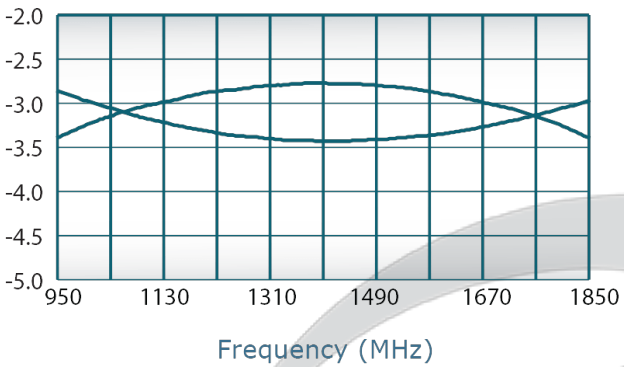
Werlatone's breakthrough technology allows us to build our existing line of Broadband 3 dB High Power 90° Hybrid Couplers. Connectorized 3 dB 90° Hybrid Coupler models are available with a choice of connectors. Several of our existing High Power 3 dB 90° RF Couplers are three port designs, wherein the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

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

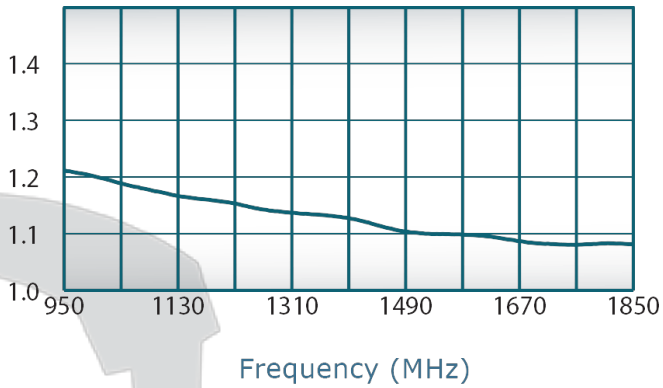


Performance Data (Specifications subject to change without notice):

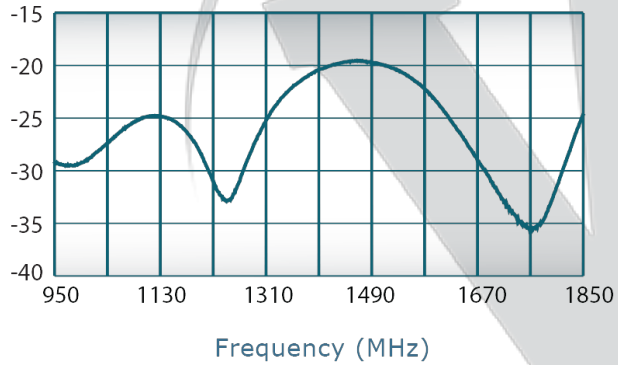
Coupling:



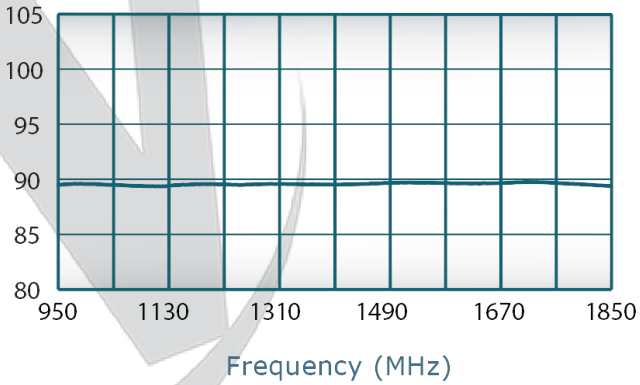
VSWR:



Isolation:



Phase Balance:



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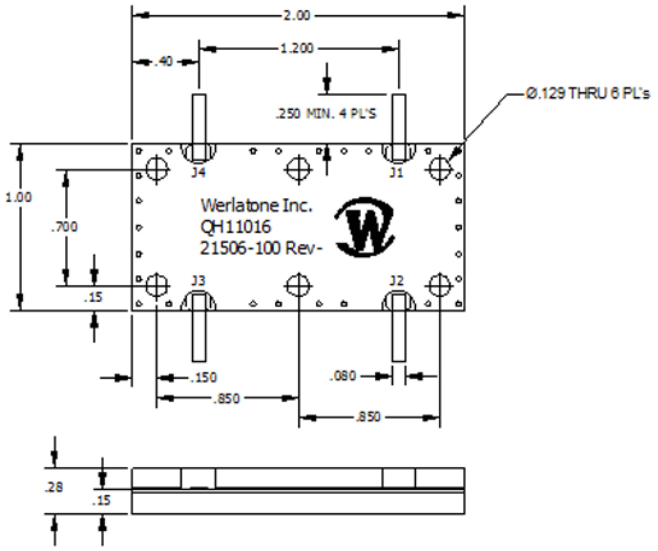
REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
1/30/2017	-	INITIAL RELEASE	GP	CS	BW
3/9/2017	A	ECN 9282	GP	CS	BW



NOTES: UNLESS OTHERWISE SPECIFIED

1. SOLDER TAB MATERIAL: 99.95% PURE SILVER. .003 THICK. LEAD IS RESISTANCE WELDED TO EXPOSED COPPER STRIPLINE TRACE. THERMALLY CONDUCTIVE EPOXY DOT WILL BE USED FOR STRAIN RELIEF.

2. TOP / BOTTOM SURFACE: .002 $^{+.002}_{-.001}$ ELECTRODEPOSITED COPPER WITH SURFACE FINISH OPTIONS BELOW:
   - QH11016-Ag-T: Immersion Silver (RoHS)
   - QH11016-Au-T ENIG (RoHS)

3. UNIT CAN BE ORDERED WITH OR WITHOUT SOLDER TABS. ADD -T AFTER PLATING CODE FOR TABBED UNIT.

4. SEE 90° DROP-IN APPLICATION NOTE FOR MORE INFORMATION

UNLESS OTHERWISE SPECIFIED
- INTERPRET DRAWING PER ASME Y14.5M-1994
- DIMENSIONING PER ASME Y14.5M-2009
- PARENTHETICAL INFO FOR REF ONLY
- DIMENSIONS ARE IN INCHES
- DIMENSIONAL LIMITS APPLY BEFORE PROCESSES
- TOLERANCES: ANGLES ± 1° / 3 PL DECIMALS ± .005 / 2 PL DECIMALS ± .01

THIRD ANGLE PROJECTION

DWN	GP	2/10/17
CHK	CS	2/10/17
ENGR		
QA		
RLSE		

WERLATONE SINCE 1965
17 Jon Barrett Road
Patterson, NY 12563

TITLE: 2-WAY 90° HYBRID COUPLER
USED ON: QH11016

SIZE	CAGE CODE	DWG NO	REV
A	28812	21506-500	A

SCALE 1:1 SHEET 1 OF 1

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