
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:

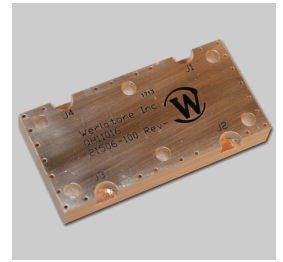
Type:	Drop-In
Plating Options:	QH11016-Ag: Immersion Silver (RoHS)
Size:	2.0 x 1.0 x 0.28"

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.

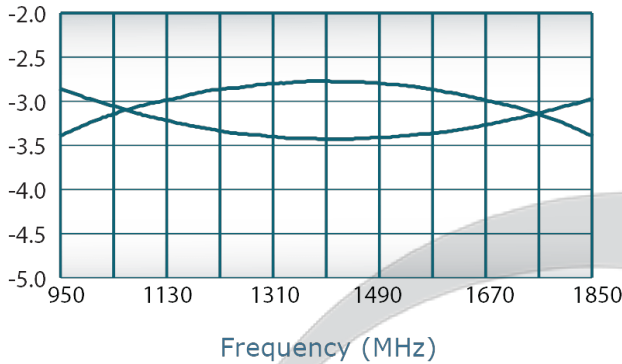


PRODUCT DATA SHEET

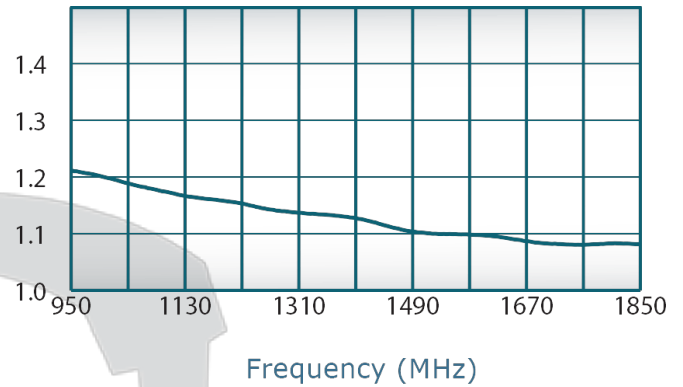
QH11016

Performance Data (Specifications subject to change without notice):

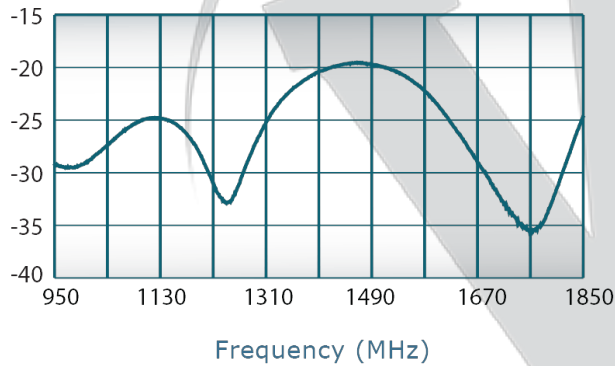
Coupling:



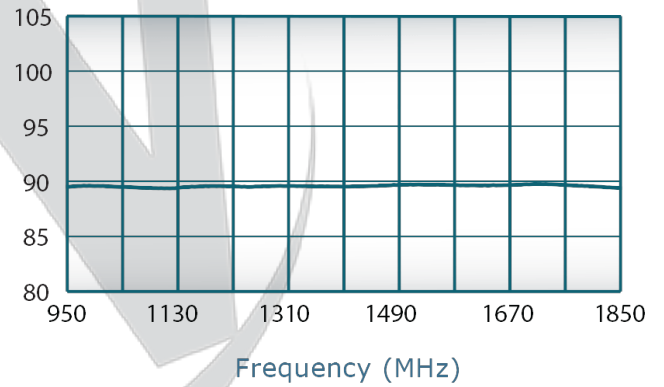
VSWR:



Isolation:



Phase Balance:



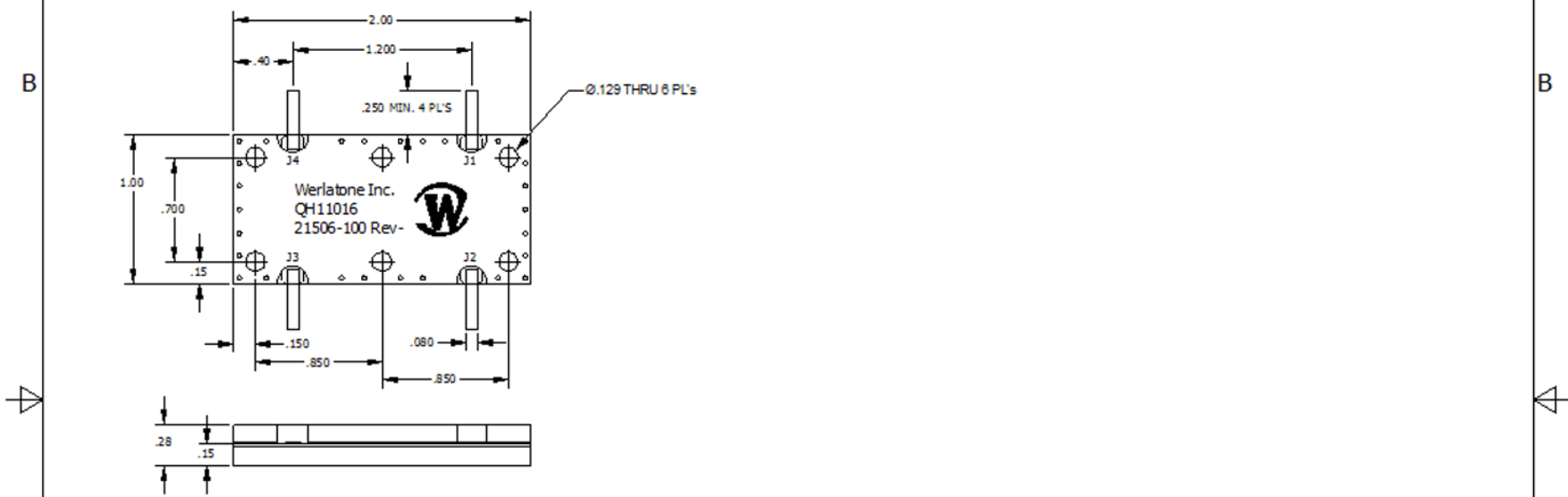
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of

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



NOTES: UNLESS OTHERWISE SPECIFIED

- 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.
- TOP / BOTTOM SURFACE: .002 ± .001 ELECTRODEPOSITED COPPER WITH SURFACE FINISH OPTIONS BELOW:
 - QH11016-Ag-T: Immersion Silver (RoHS)
 - QH11016-Au-T ENIG (RoHS)
- 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

UNLESS OTHERWISE SPECIFIED
 • INTERRUPT DRAWING DIM 10L47C-100
 • DIMENSIONING PER ASME Y14.5M-2009
 • PARALLEL DIMENSIONS ONLY
 • DIMENSIONS ARE IN INCHES
 • DIMENSIONAL LIMITS APPLY
 • SURFACE PROCESSES
 • TOLERANCES: ANGLE = 2°
 2 PL. DECIMALS = .005
 3 PL. DECIMALS = .01

DWG	GP	DATE	2/10/17	WERLATONE SINCE 1965 17 Jon Barrett Road Patterson, NY 12563
CHK	CS	DATE	2/10/17	
ENGR		DATE		TITLE
		DATE		2-WAY 90° HYBRID COUPLER
		DATE		USED ON
		DATE		QH11016
		DATE		SIZE
		DATE		A
		DATE		CAGE CODE
		DATE		28812
		DATE		DWG NO
		DATE		21506-500
		DATE		REV
		DATE		
		DATE		SCALE
		DATE		1:1
		DATE		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