

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: $\pm 5^\circ$ dB Max.
 Amplitude Balance: ± 0.5 dB Max.
 Isolation: 19 dB Min.

Mechanical Specifications:

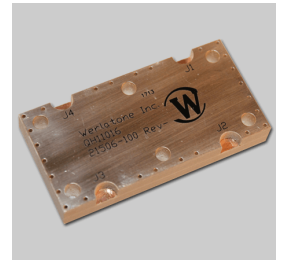
Type: Drop-In
 Plating Options: QH11016-Ag: Immersion Silver (RoHS)
 Size: 2.0 x 1.0 x 0.28"

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.

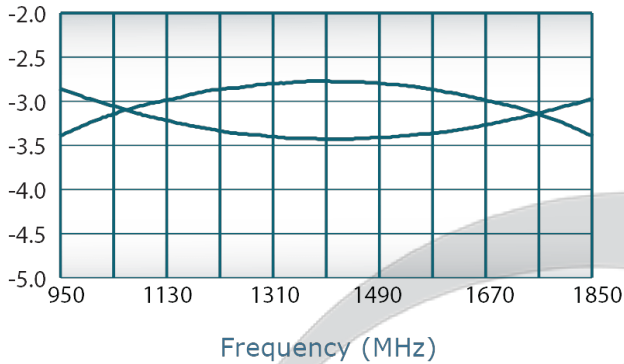


PRODUCT DATA SHEET

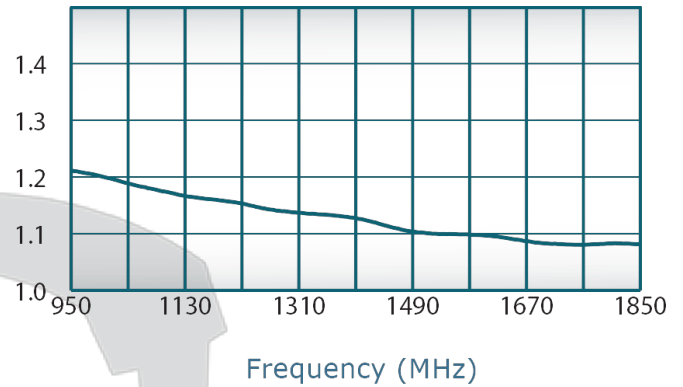
QH11016

Performance Data (Specifications subject to change without notice):

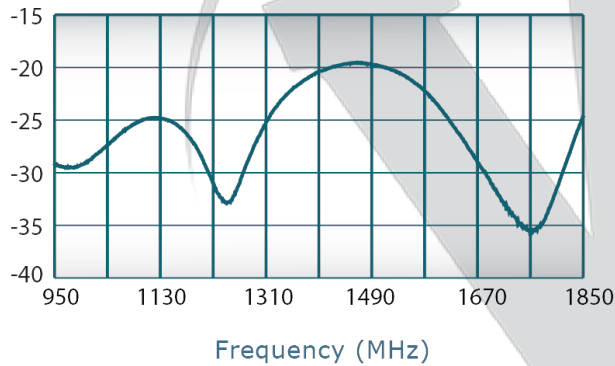
Coupling:



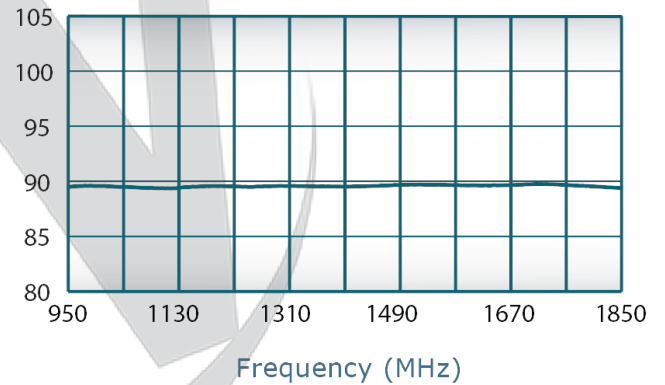
VSWR:



Isolation:



Phase Balance:

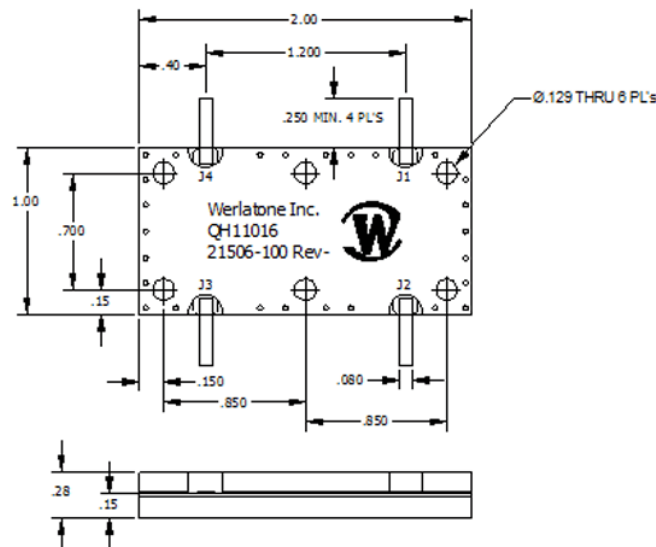


Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

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 \pm .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:
 • INTERPRET DRAWING DAY 104270-100
 • DIMENSIONS PER ASME Y14.5-2009
 • PARALLELISM DIMS FOR ONLY
 • DIMENSIONS ARE IN INCHES
 • DIMENSIONAL LIMITS APPLY
 • SURFACE FINISHES:
 • 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			
				2-WAY 90° HYBRID COUPLER			
				USED ON			
				QH11016			
REV		DATE		SIZE	CAGE CODE	DWG NO	REV
				A	28812		21506-500A
				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