

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.

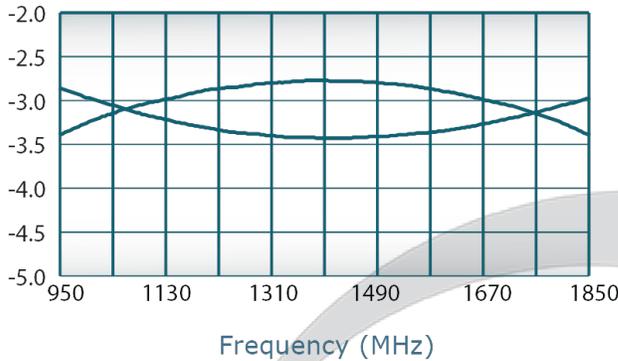


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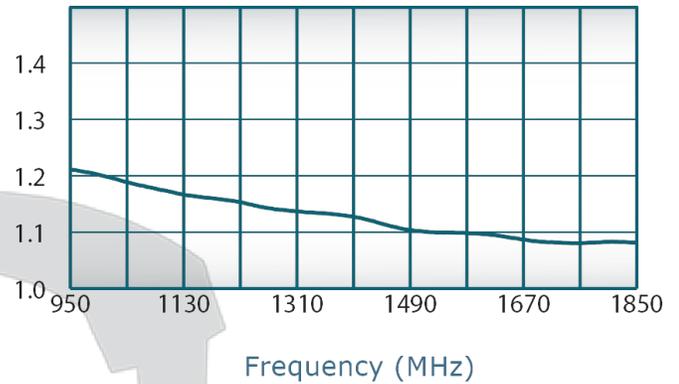
QH11016

Performance Data (Specifications subject to change without notice):

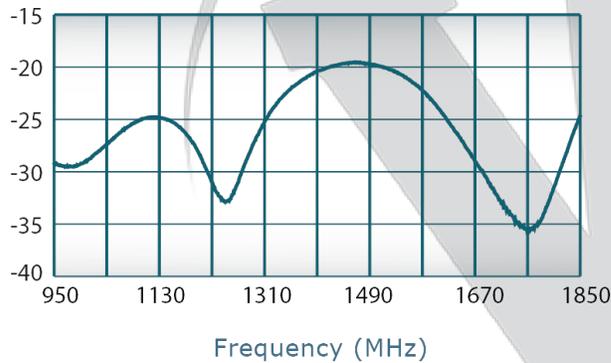
Coupling:



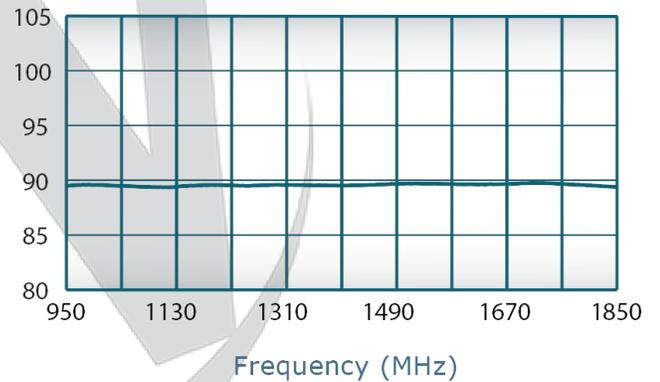
VSWR:



Isolation:



Phase Balance:



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Werlatone, Inc.

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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

- 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 104242-100
 • DIMENSIONING PER ASME Y14.5M-2009
 • PARALLEL DIMENSIONS FOR DIMENSIONS 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 Jan Barrett Road Patterson, NY 12563
CHK	CS	DATE	2/10/17		TITLE
ENGR		DATE		2-WAY 90° HYBRID COUPLER	
APP		DATE		USED ON	
FILE		DATE		QH11016	
				SIZE	CAGE CODE
				A	28812
				DWG NO	REV
					21506-500A
				SCALE	SHEET 1 OF 1
				1:1	

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