
PRODUCT DATA SHEET
QH7856
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 Connectorized Drop-In & Surface Mount

Electrical Specifications:

Frequency:	500 - 2000 MHz
Power:	200 W CW
Insertion Loss:	0.55 dB Max.
VSWR:	1.35:1 Max.
Phase Balance:	90° ± 5° Max.
Amplitude Balance:	± 0.5 dB Max.
Isolation:	18 dB Min.

Mechanical Specifications:

Type:	Connectorized
Material:	Aluminum 6061-T6
Surface Finish:	Chem. Film Per MIL-DTL-5541F Type I Class 3 (Yellow Iridite) RoHS Compliant Available
Operating Temperature:	-55°C to +75°C
Storage Temperature:	-60°C to +85°C
Weight:	4 oz.
Size:	2.1 x 1.49 x 0.75"

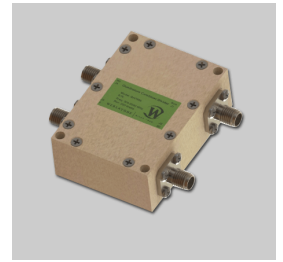
Port Configurations:

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

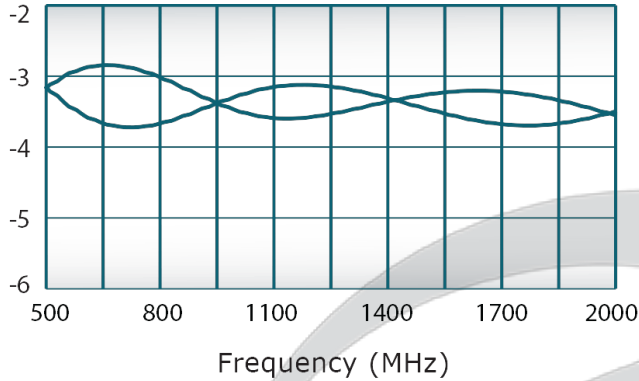
Werlatone's breakthrough technology allows us to build our existing line of Broadband 3 dB High Power 90° Hybrid Couplers. Connectorized 3 dB 90° Hybrid Coupler models are available with a choice of connectors. Several of our existing High Power 3 dB 90° RF Couplers are three port designs, wherein the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

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

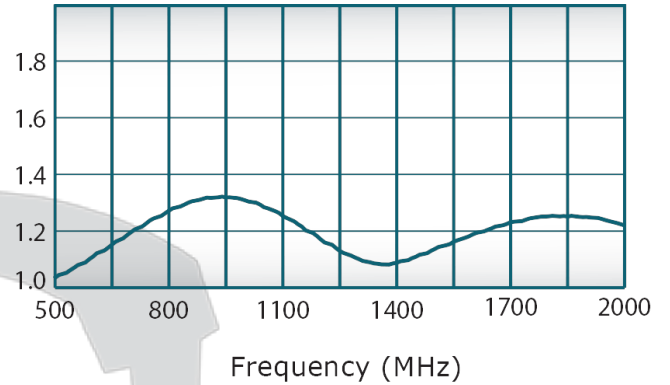
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com


Performance Data (Specifications subject to change without notice):

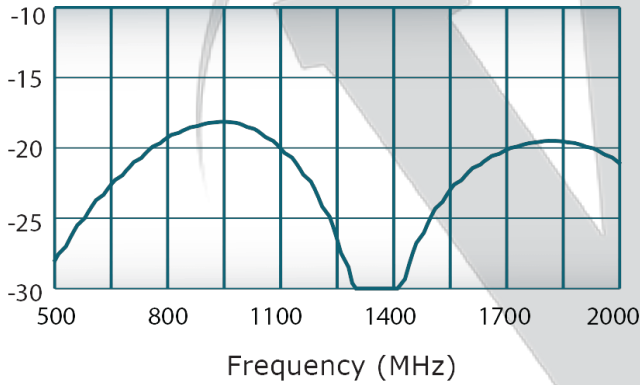
Coupling:



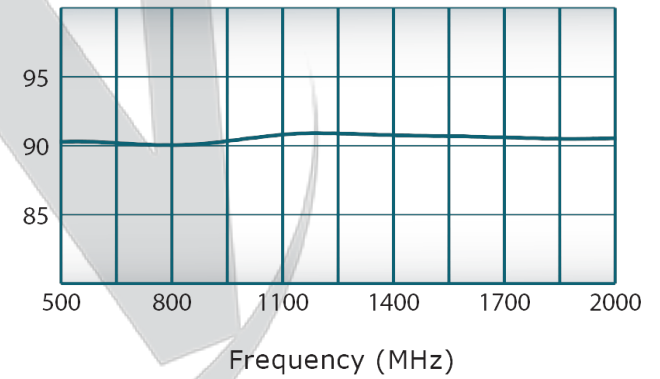
VSWR:



Isolation:

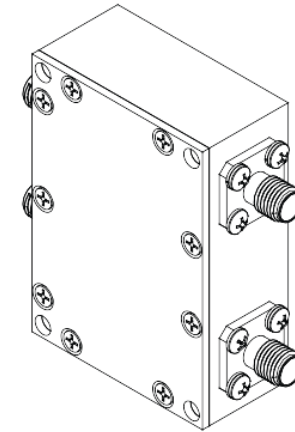
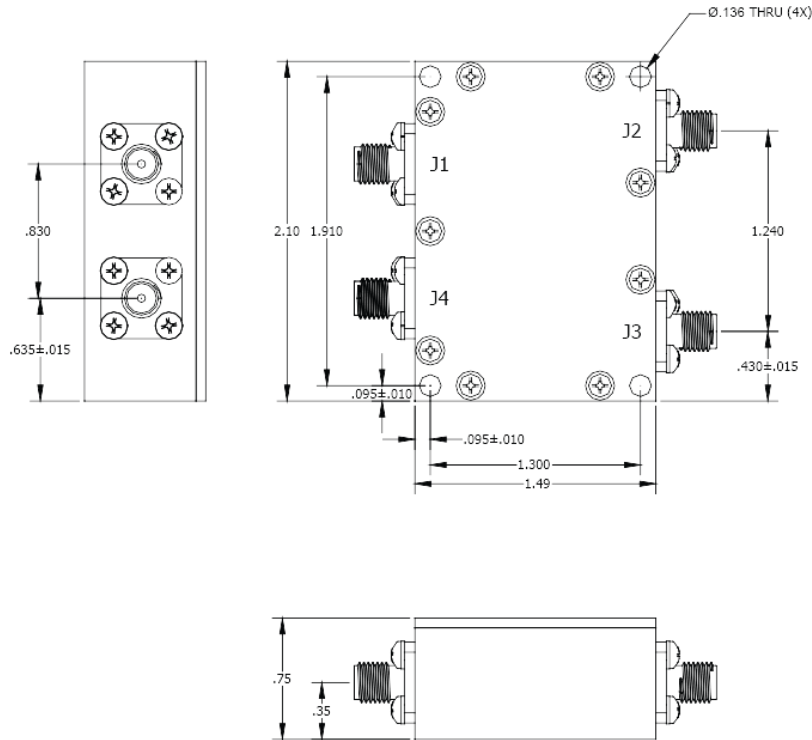


Phase Balance:



RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION
This document contains proprietary information which is the sole property of Werlatone, Inc.

REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
1/18/07	-	INITIAL RELEASE	GP	NH	BW
1/30/07	-	ECN 4154	GP	NH	BW
1/14/09	A	ECN 5049	GP	NH	BW
8/16/11	B	ECN 5443	GP	NH	BW
10/15/19	D	ECN 9859	GP	NH	BW



ELECTRICAL SPECIFICATIONS

Frequency: 0.5 - 2.0 GHz
 Power: 200 Watts CW
 Insertion Loss: 0.55 dB Max.
 Amplitude Balance: ± 0.5 dB Max.
 Phase Balance: 90° ± 5° Max.
 VSWR: 1.35:1
 Isolation: 18 dB Min. J2-J3
 Temperature: -55°C To +85°C

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

NOTES UNLESS OTHERWISE SPECIFIED:

- MAT'L: ALUMINUM 6061-T6
- FINISH: CHEM FILM PER MIL-DTL-5541F Type I Class 3 (Yellow Iridite)
- Connectors: All SMA Female

UNLESS OTHERWISE SPECIFIED		DWN	DATE	WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563		
<ul style="list-style-type: none"> INTERPRET DRAWING LAW MIL-STD-100 DIMENSIONING PER ASME Y14.5M-2009 PARENTHETICAL INFO FOR REF ONLY DIMENSIONS ARE IN INCHES DIMENSIONAL LIMITS APPLY BEFORE PROCESSING 	GP	1/14/10					
<ul style="list-style-type: none"> TOLERANCES: ANGLE ± 2° 3 PL ± .005 2 PL ± .015 	CHK	DATE	QH7856-102				
	ENGR	DATE			TITLE		
	APVD	DATE			SIZE	CAGE CODE	DWG NO
	THIRD ANGLE PROJECTION	SCALE 1:1			SHEET 1 OF 1		
	QA	DATE	SIZE	CAGE CODE	DWG NO		
	RLSE	DATE	SCALE	28812	20303-500		

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