

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: $90^\circ \pm 5^\circ$ 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.

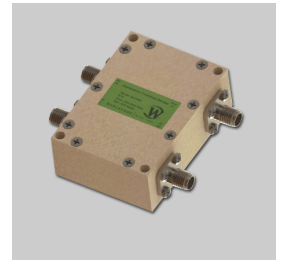
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

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



WERLATONE

Model QH7856
90° Hybrids Connectorized

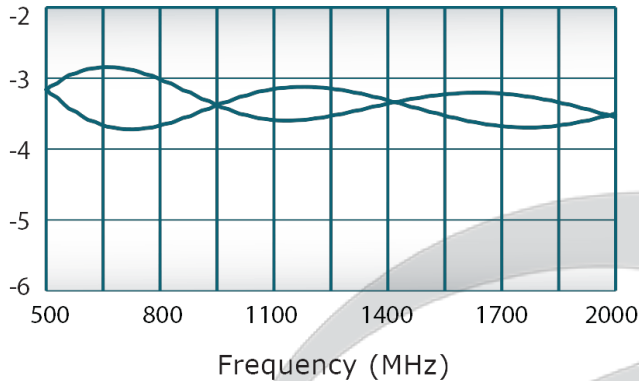


PRODUCT DATA SHEET

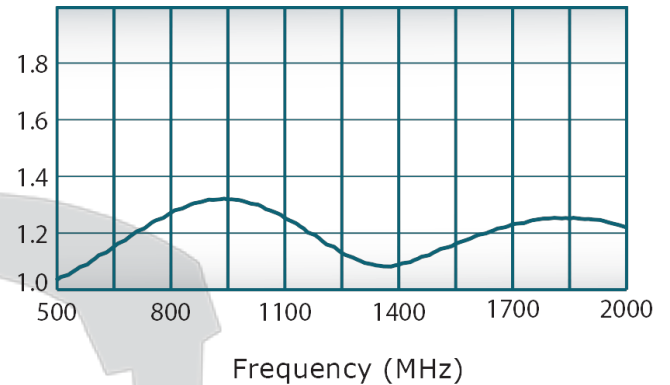
QH7856

Performance Data (Specifications subject to change without notice):

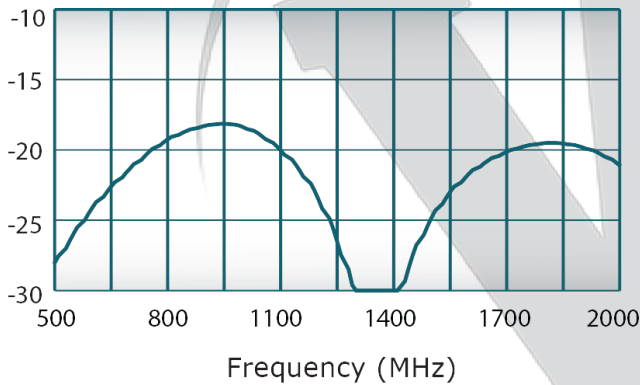
Coupling:



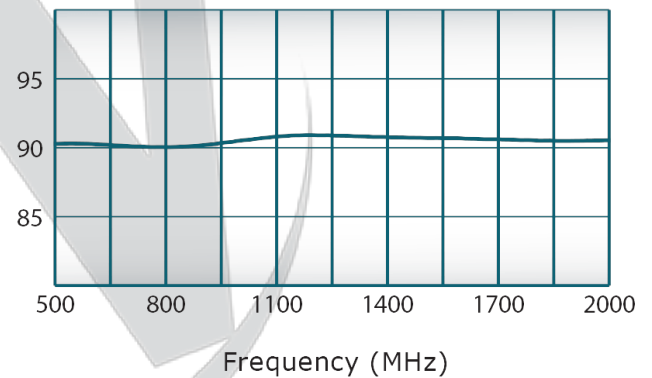
VSWR:



Isolation:



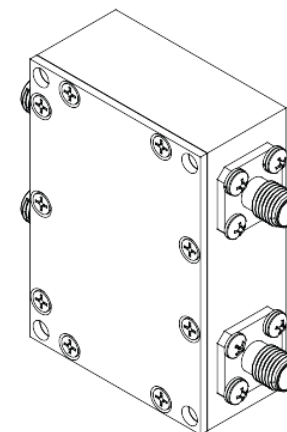
Phase Balance:



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

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



Frequency:	0.5 - 2.0 GHz
Power:	200 Watts CW
Insertion Loss:	0.55 dB Max.
Amplitude Balance:	± 0.5 dB Max.
Phase Balance:	$90^\circ \pm 5^\circ$ 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

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

UNLESS OTHERWISE SPECIFIED • INTERPRET DRAWING SAN MIL STD-100 • DIMENSIONING PER ASME Y14.5M-2009 • PARENTHETICAL INFO FOR REF ONLY • DIMENSIONS ARE IN CHAINS • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES TOLERANCES: ANGLE ± 2° 2 PL 8 .005 2 PL 8 .015	DWN	GP	DATE	W WERLATONE SINCE 1965			17 Jon Barrett Rd Patterson, NY 12563	
	CHK		DATE	TITLE QH7856-102			20303-500	
	ENGR		DATE					
	APVD		DATE					
	QA		DATE					
	RLSE		DATE					
	THIRD ANGLE PROJECTION 			SIZE	CAGE CODE	DWG NO	REV	
			A	28812				
			SCALE	1:1		SHEET 1 OF 1		

3