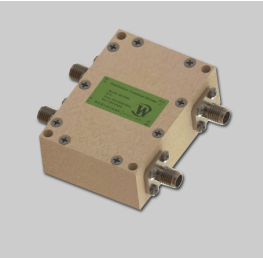
WERLATONE

Model QH7856
90° Hybrids Connectorized



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''

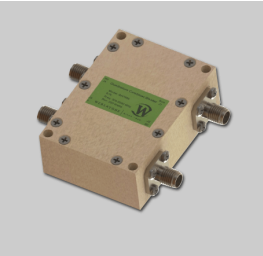
Port Configurations:

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.

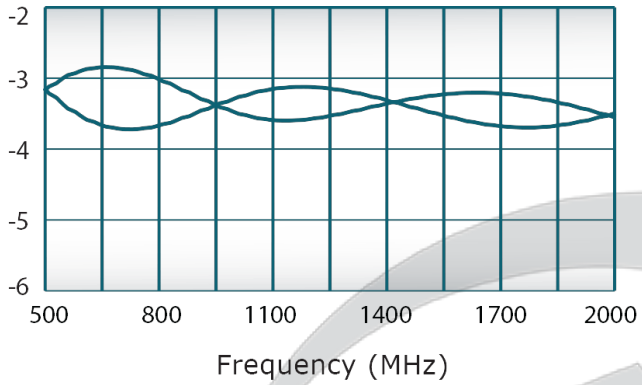
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Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

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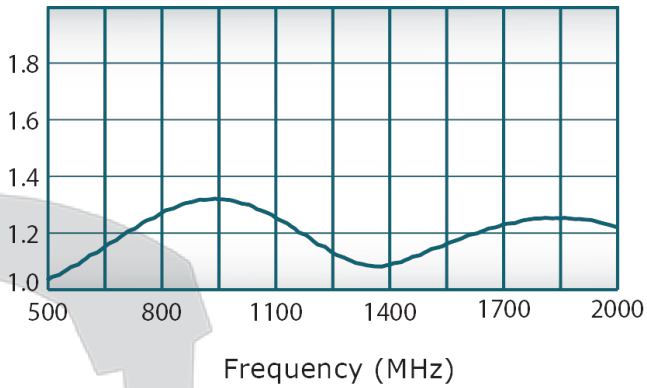


Performance Data (Specifications subject to change without notice):

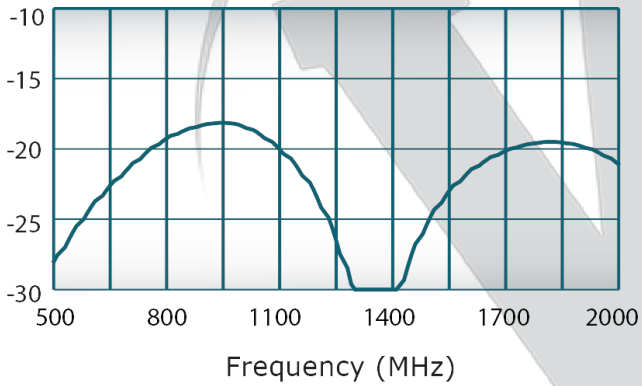
Coupling:



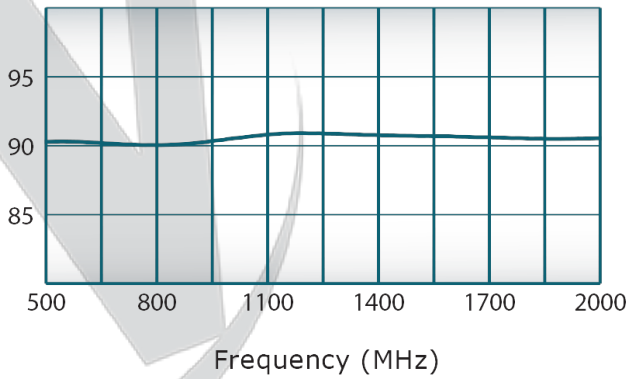
VSWR:



Isolation:



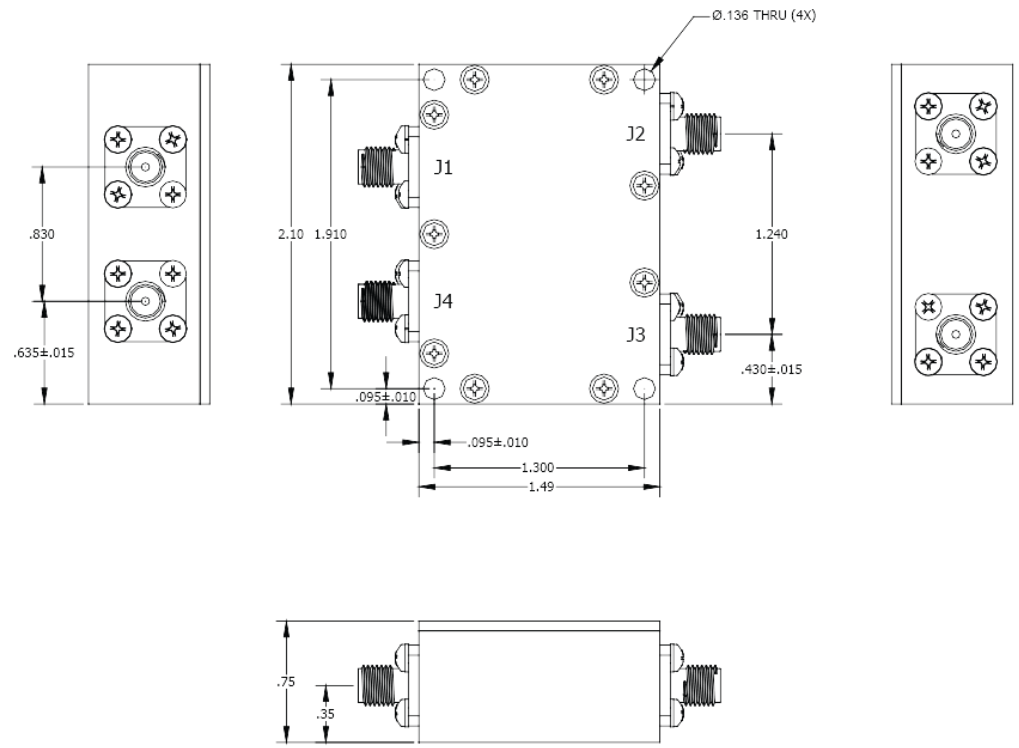
Phase Balance:

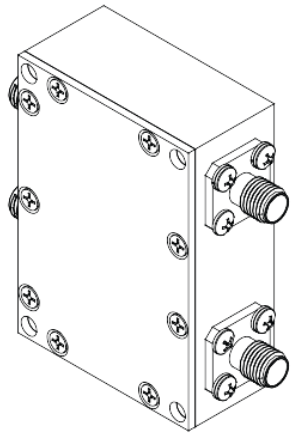


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REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
1/18/07	-	INITIAL RELEASE	GP	NH	BW
1/30/07	A	ECN 4154	GP	NH	BW
1/14/09	B	ECN 5049	GP	NH	BW
8/16/11	C	ECN 5443	GP	NH	BW
10/15/19	D	ECN 9859	GP	NH	BW





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:

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 IAW MIL-STD-100
- DIMENSIONING PER ASME Y14.5M-2009
- PARENTHETICAL INFO FOR REF ONLY
- DIMENSIONS ARE IN INCHES
- DIMENSIONAL LIMITS APPLY BEFORE PROCESSES
- TOLERANCES: ANGLE ± 2° / 3 PL ± .005 / 2 PL ± .015

THIRD ANGLE PROJECTION

DWN	GP	DATE 1/14/10
CHK		DATE
ENGR		DATE
APVD		DATE
QA		DATE
RLSE		DATE

WERLATONE | SINCE 1965
17 Jon Barrett Rd
Patterson, NY 12563

TITLE
QH7856-102

SIZE	CAGE CODE	DWG NO	REV
A	28812	20303-500	D

SCALE 1:1 SHEET 1 OF 1

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