WERLATONE

Model QH7816
90° Hybrids Connectorized

PRODUCT DATA SHEET **QH7816**

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:	100 - 512 MHz
Power:	200 W CW
Insertion Loss:	0.4 dB Max.
VSWR:	1.30:1 Max.
Phase Balance:	90° ± 5° Max.
Amplitude Balance:	± 0.55 dB Max.
Isolation:	20 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:	0.5 lbs.
Size:	3.7 x 1.92 x 0.85''

Port Configurations:

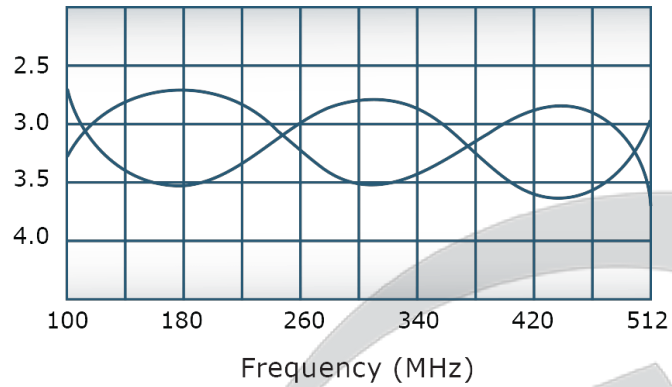
J1	**J2**	**J3**	**J4**
Input	-3 dB. 0°	-3 dB. -90°	Isolated
-3 dB. 0°	Input	Isolated	-3 dB. -90°
-3 dB. -90°	Isolated	Input	-3 dB. 0°
Isolated	-3 dB. -90°	-3 dB. 0°	Input

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.

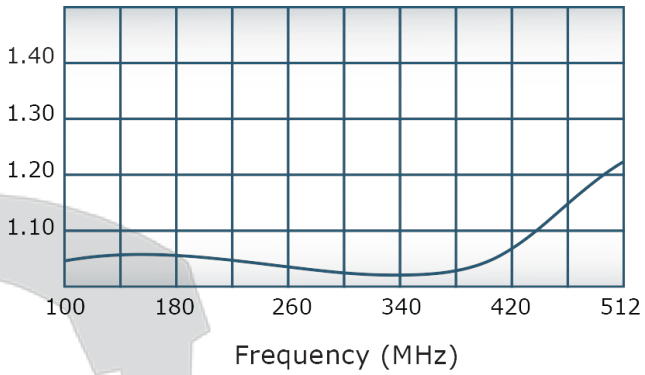
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Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

Performance Data (Specifications subject to change without notice):

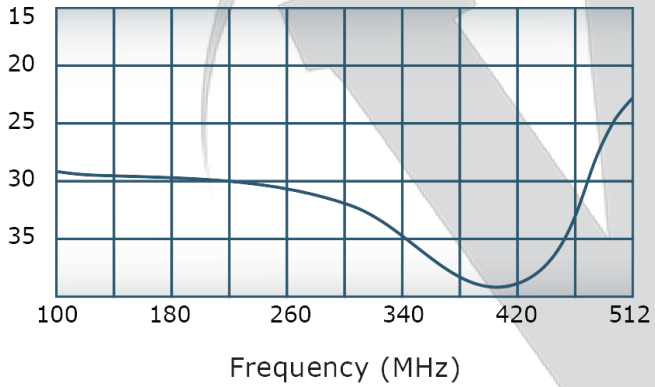
Coupling:



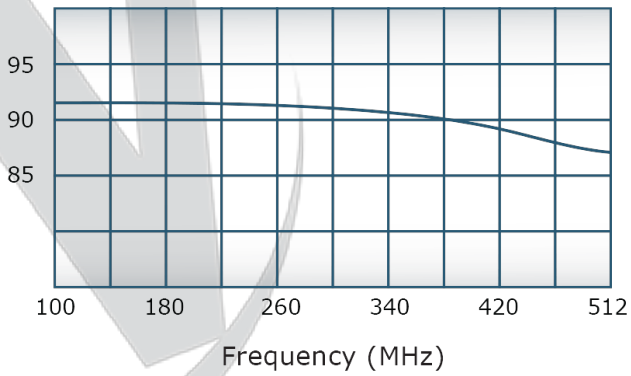
VSWR:



Isolation:



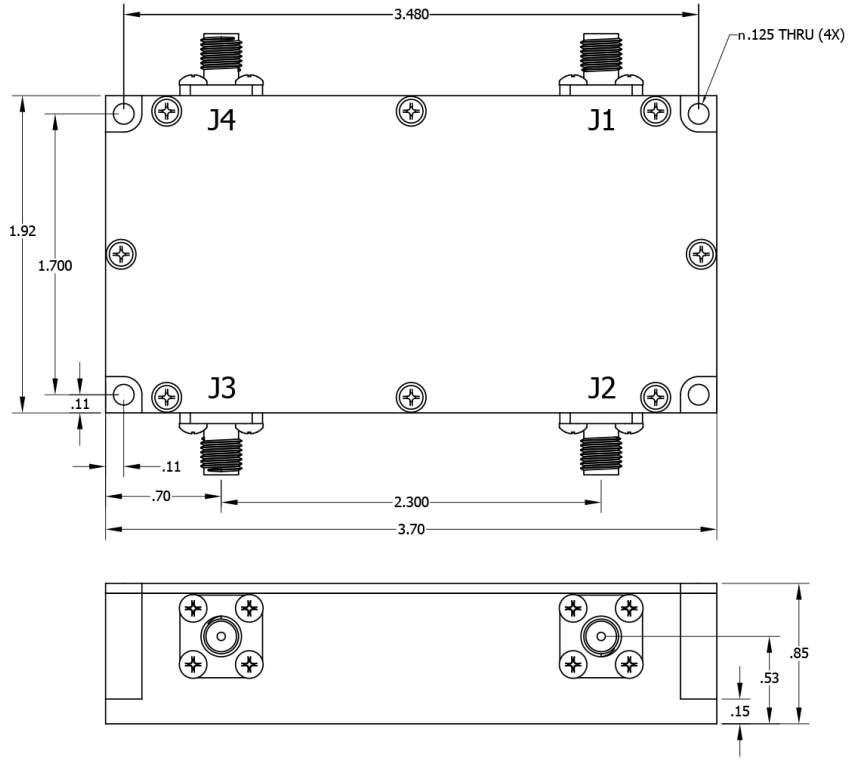
Phase Balance:

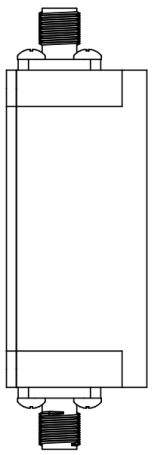


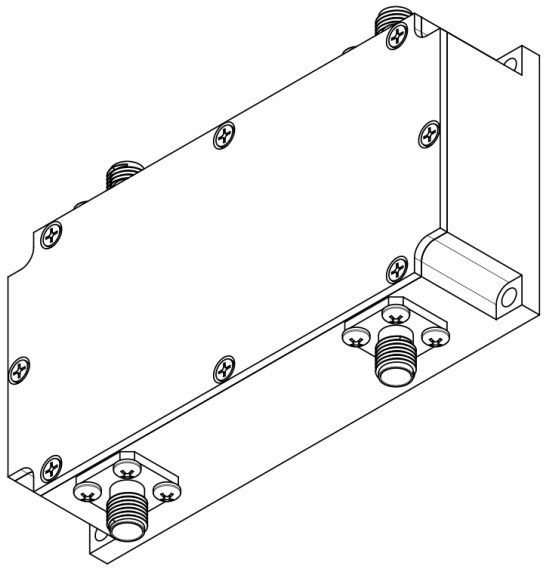
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REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
11/3/2006	-	INITIAL RELEASE	JE	MJ	BW
9/9/2008	A	ECN 4604	GP	NH	BW
12/2/2008	B	ECN 4659	GP	NH	BW
12/9/2009	C	ECN 5023	GP	NH	BW







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

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: ANGLES ± 2°
.XXX ± .005
.XX ± .015

THIRD ANGLE PROJECTION

DWN	GP	DATE 11/3/2006
CHK		DATE
ENGR		DATE
MFGR		DATE
QA		DATE
RLSE		DATE

WERLATONE | SINCE 1965

2095 Route 22
Brewster, NY 10509

TITLE

USED ON

SIZE	CAGE CODE	DWG NO	REV
A	28812	20287-500	C

SCALE 1:1 SHEET 1 OF 1

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