



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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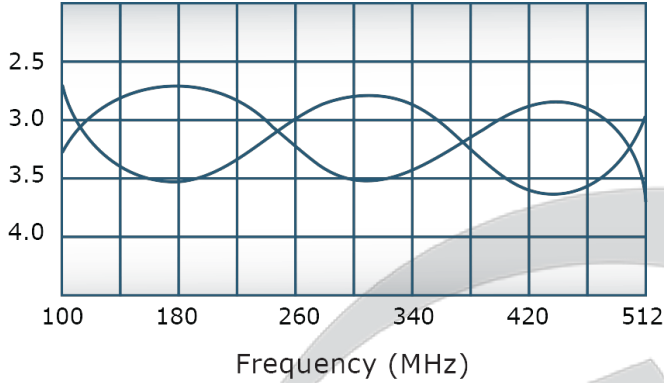
Werlatone, Inc.

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

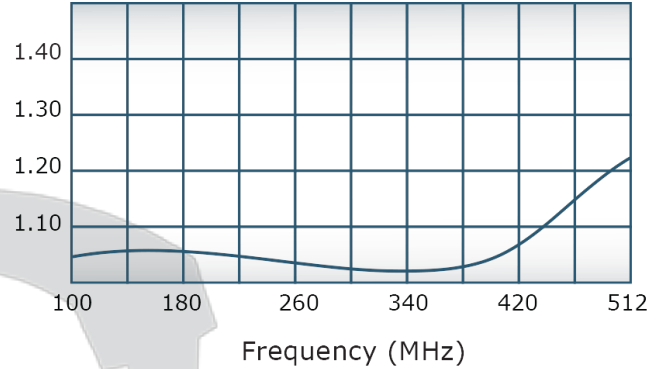


Performance Data (Specifications subject to change without notice):

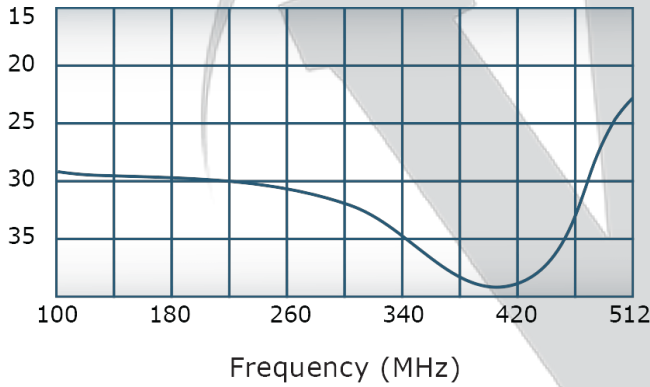
Coupling:



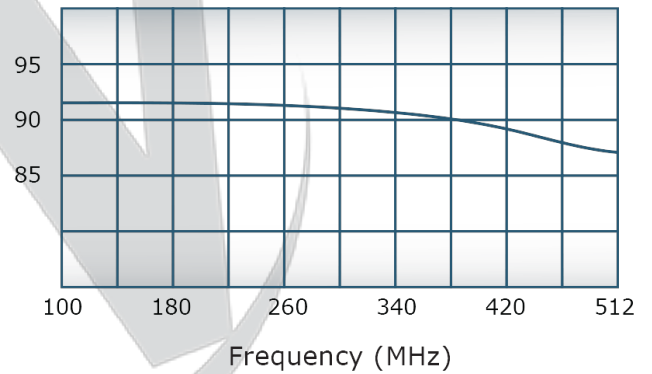
VSWR:



Isolation:



Phase Balance:



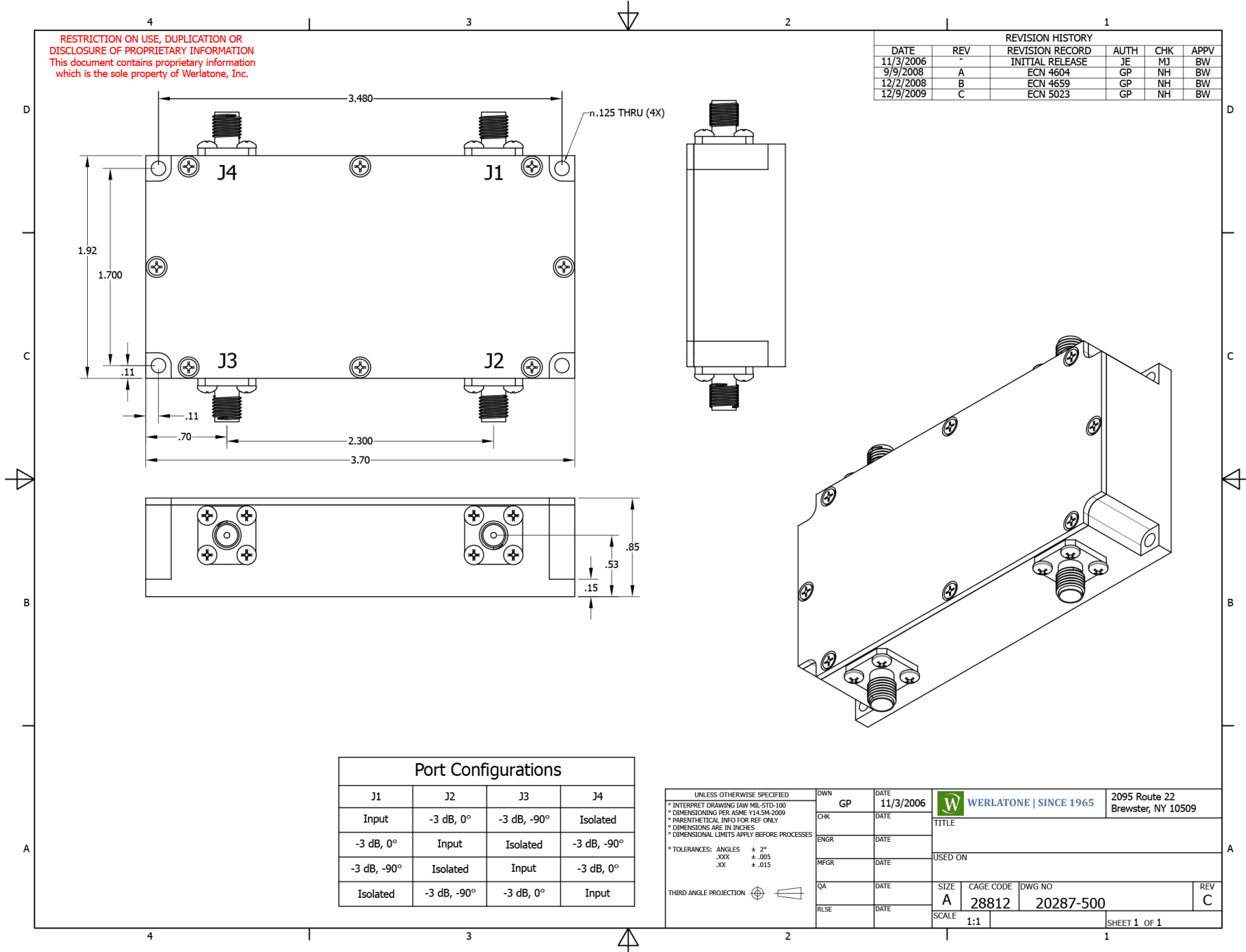
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REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
11/3/2006	-	INITIAL RELEASE	JE	NJ	BW
9/9/2008	A	ECN 4604	GP	NH	BW
12/2/2008	B	ECN 4659	GP	NH	BW
12/9/2009	C	ECN 5023	GP	NH	BW



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		DWN	GP	DATE	11/3/2006	WERLATONE SINCE 1965 2095 Route 22 Brewster, NY 10509			
<small>* INTERPRET DRAWING IAW MIL-STD-100 * DIMENSIONING PER ASME Y14.5M-2009 * PARENTHEetical INFO FOR REF ONLY * DIMENSIONS ARE IN INCHES * DIMENSIONAL LIMITS APPLY BEFORE PROCESSES</small>		CHK		DATE					
<small>* TOLERANCES: ANGLES ± 2° .XXX ± .005 .XX ± .015</small>		ENGR		DATE		TITLE			
THIRD ANGLE PROJECTION		MFR		DATE		USED ON			
		QA		DATE		SIZE	CAGE CODE	DWG NO	REV
		RLSE		DATE		A	28812	20287-500	C
				SCALE	1:1			SHEET 1 OF 1	

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