



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.

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

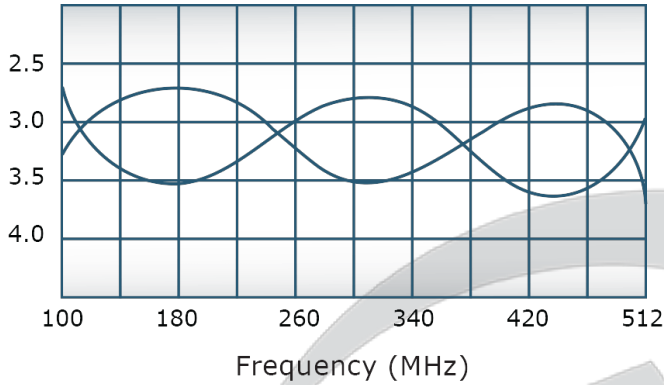
Werlatone, Inc.

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

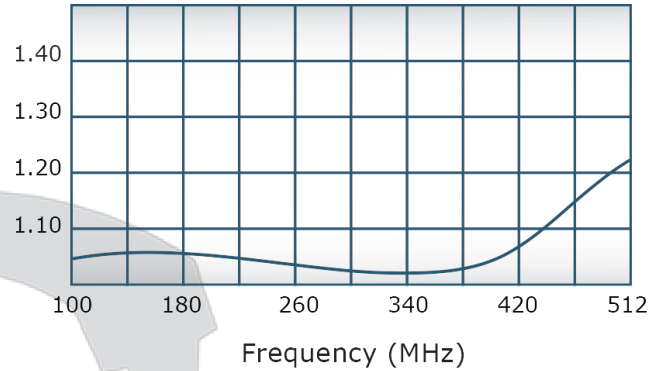


Performance Data (Specifications subject to change without notice):

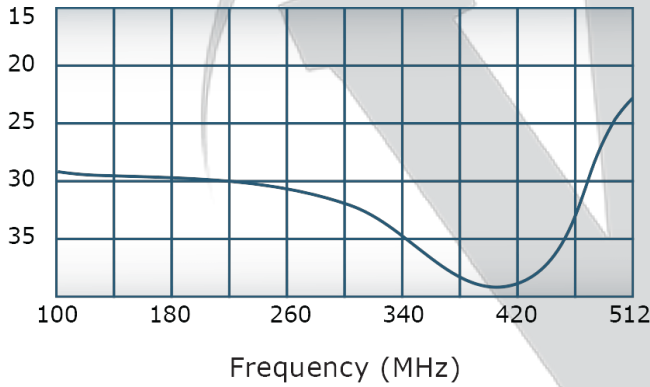
Coupling:



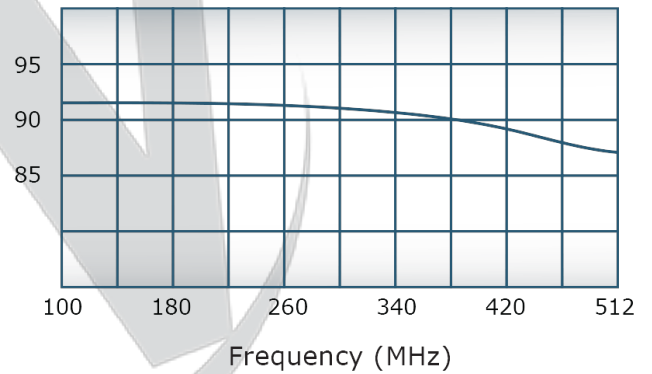
VSWR:



Isolation:



Phase Balance:



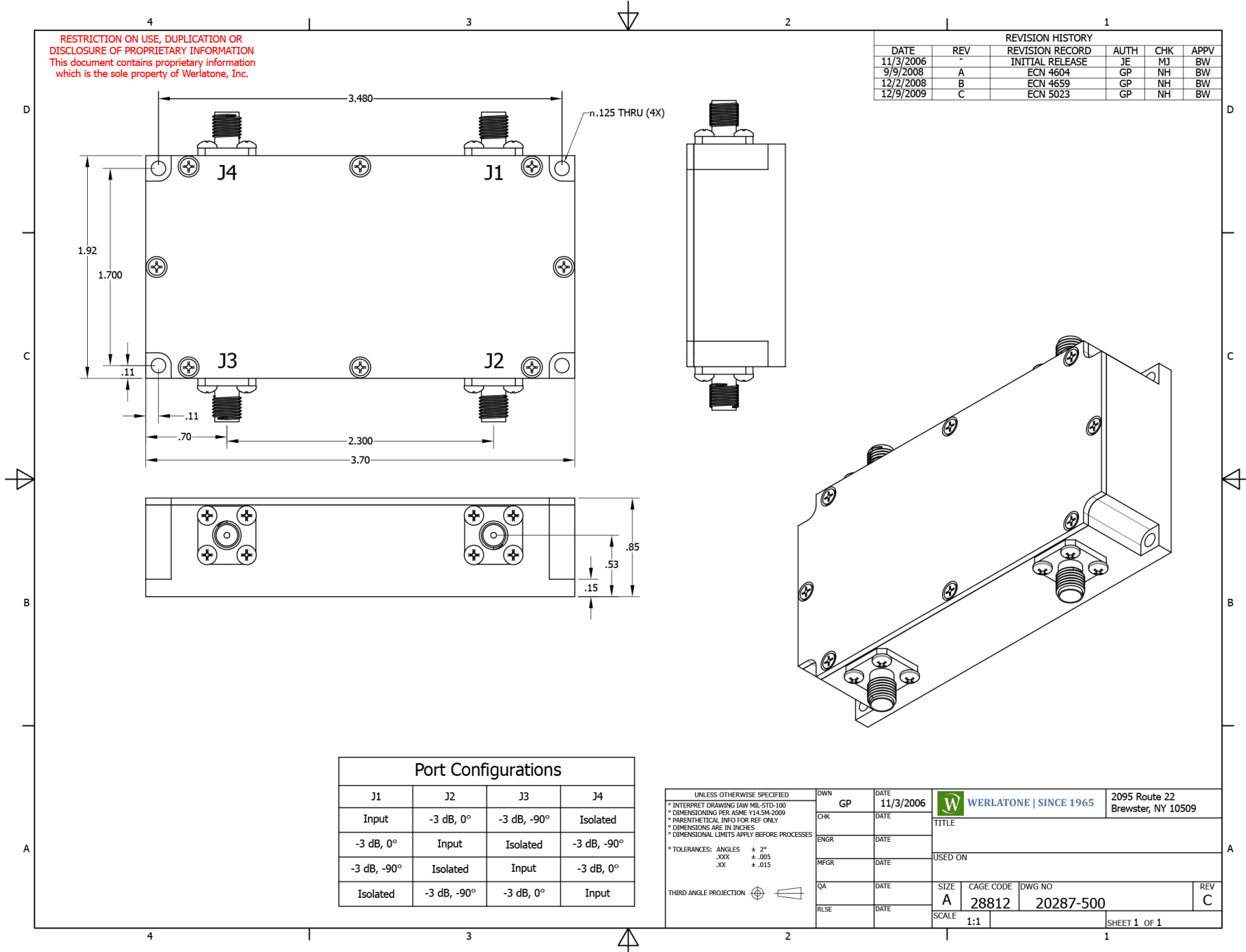
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of

Werlatone, Inc.

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

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
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
 * 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
 * TOLERANCES: ANGLES ± 2°
 .XXX ± .005
 .XX ± .015

DWN	GP	DATE	11/3/2006	WERLATONE SINCE 1965 2095 Route 22 Brewster, NY 10509			
CHK		DATE					
ENGR		DATE		TITLE			
MFR		DATE		USED ON			
QA		DATE		SIZE	CAGE CODE	DWG NO	REV
RLSE		DATE		A	28812	20287-500	C
THIRD ANGLE PROJECTION				SCALE	1:1	SHEET 1 OF 1	

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