



PRODUCT DATA SHEET

QH8281

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 - 3000 MHz
 Power: 200 W CW
 Insertion Loss: 0.7 dB Max.
 VSWR: 1.35:1 Max.
 Phase Balance: 90° ± 5° Max.
 Amplitude Balance: ± 0.75 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: 3.5 oz.
 Size: 2.1 x 1.49 x 0.75"

Connector Configurations:

Model	Sum Port (J1)	0°, 90° (J2,J3)	Iso. Port (J4)
QH8281-102	SMA	SMA	SMA

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.

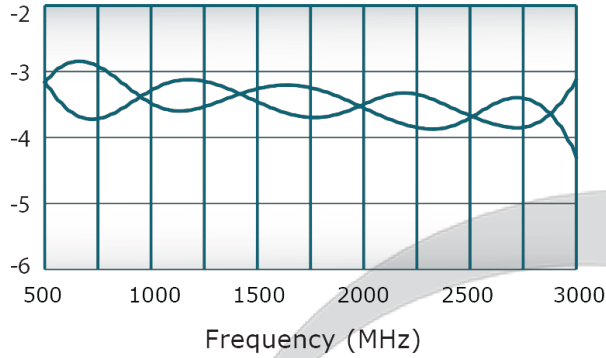
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

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

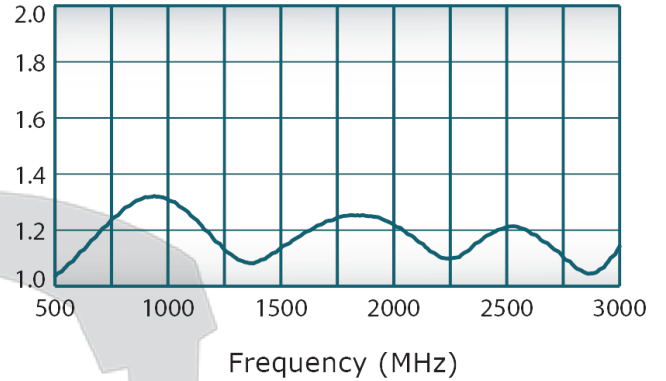


Performance Data (Specifications subject to change without notice):

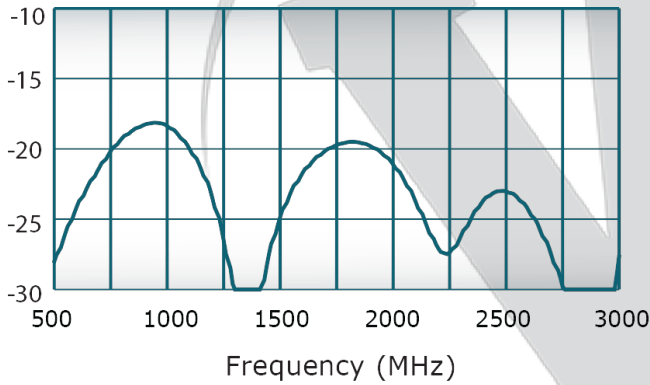
Coupling:



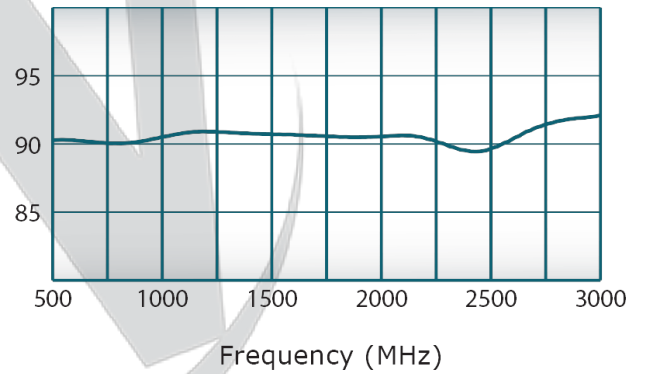
VSWR:



Isolation:



Phase Balance:



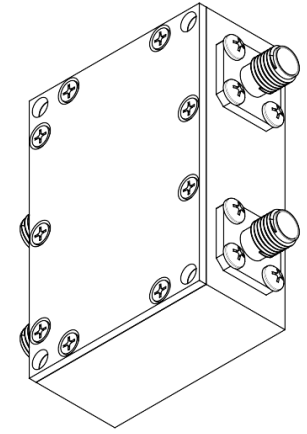
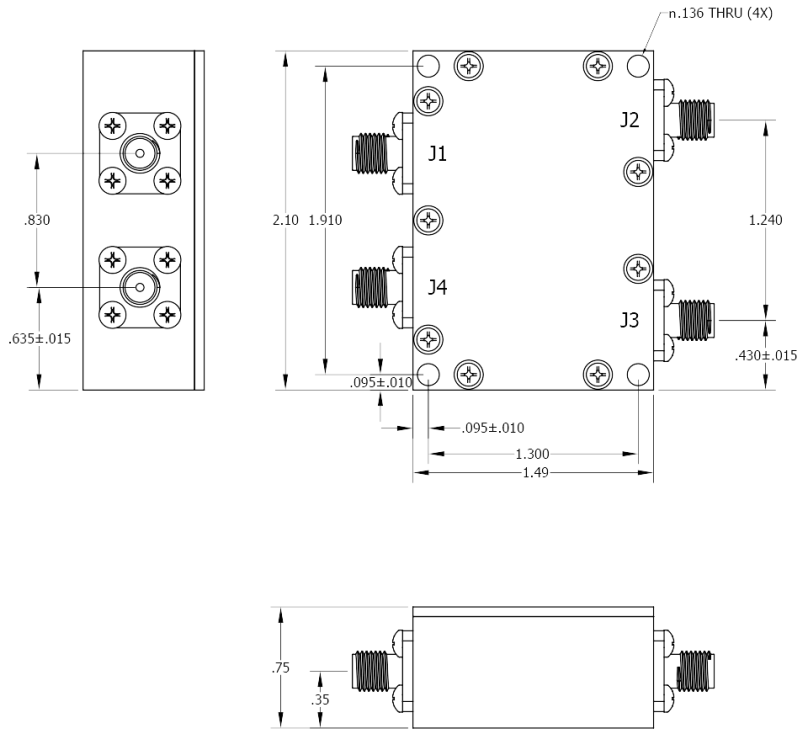
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of

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
1/14/10	-	INITIAL RELEASE	GP	NH	BW
8/11/11	A	ECN 5440	GP	NH	BW
9/15/17	B	ECN 9410	GP		BW



UNLESS OTHERWISE SPECIFIED		DWN	DATE	WERLATONE SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563
<ul style="list-style-type: none"> • INTERPRET DRAWING IAW MIL-STD-100 • DIMENSIONING PER ASME Y14.5M-2009 • PARENTHETICAL TUPU FOR REF ONLY • DIMENSIONS ARE IN INCHES • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES • TOLERANCES: ANGLE ± 2° 2 PL ± .005 3 PL ± .015 • REMOVE ALL BURRS AND SHARP EDGES • .01 R MAX • CONCENTRICITY MACHINED DIA: .002 FIM • MACHINE TOOL MISMATCH .003 MAX 		GP	1/14/2010	
		CHK	DATE	QH8281-102 3dB Hybrid Coupler TITLE
		ENGR	DATE	
		APVD	DATE	
		QA	DATE	
		RLSE	DATE	SIZE: A CAGE CODE: 28812 DWG NO: 20585-500 SCALE: 1:1
THIRD ANGLE PROJECTION				REV: B 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