

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:

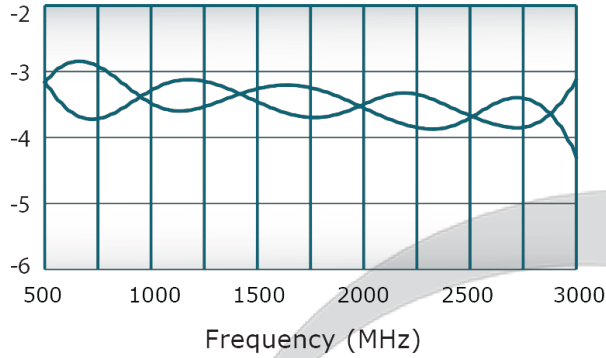
Model	Sum Port (J1)	0°, 90° (J2,J3)	Iso. Port (J4)
QH8281-102	SMA	SMA	SMA

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.

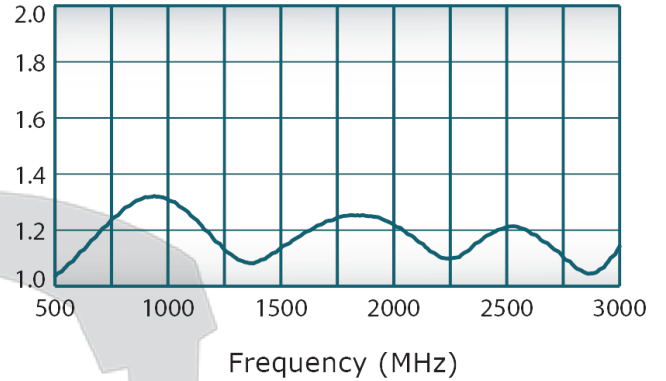


Performance Data (Specifications subject to change without notice):

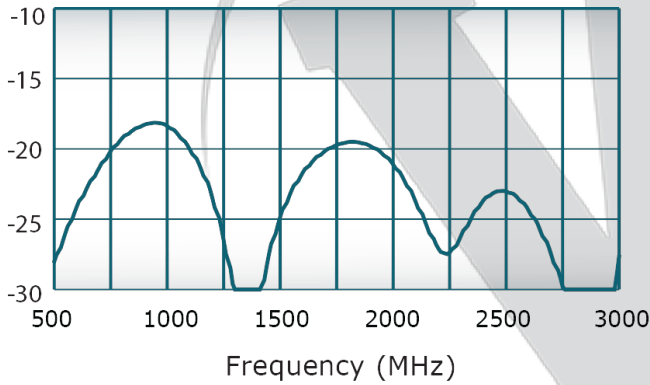
Coupling:



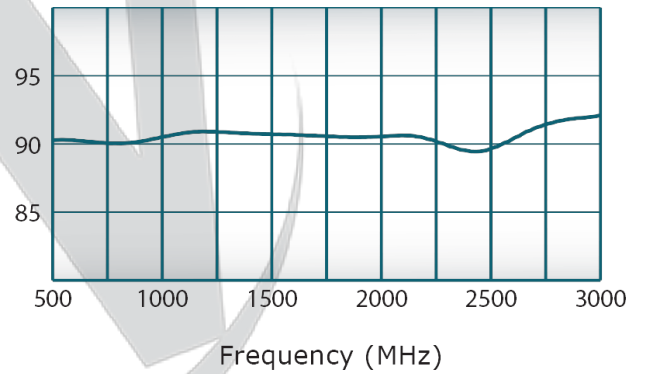
VSWR:



Isolation:



Phase Balance:



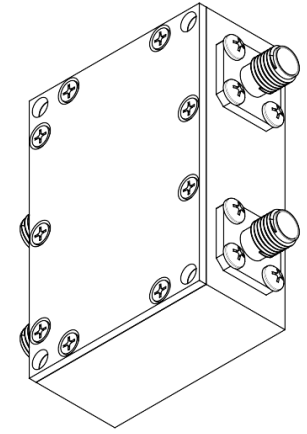
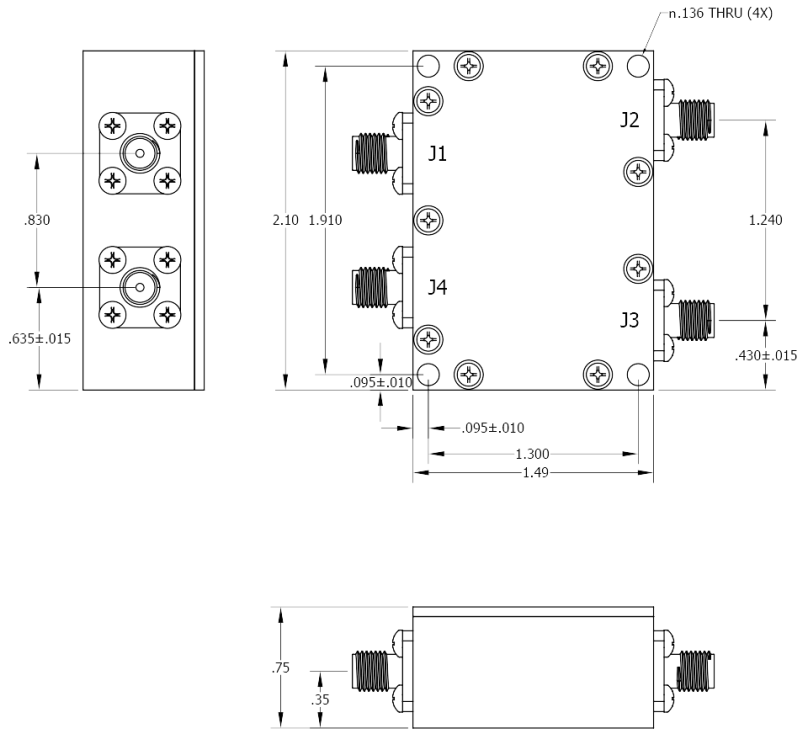
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Werlatone, Inc.

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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		
THIRD ANGLE PROJECTION		CHK	DATE	TITLE
		ENGR	DATE	QH8281-102 3dB Hybrid Coupler
		APVD	DATE	SIZE
		QA	DATE	CAGE CODE
		RLSE	DATE	DWG NO
				REV
				A
				28812
				20585-500
				B
				SCALE
				1:1
				SHEET 1 OF 1

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