

**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:            80 - 1000 MHz  
 Power:                250 W CW  
 Insertion Loss:      0.7 dB Max.  
 VSWR:                1.45:1 Max.  
 Phase Balance:      90° ± 5° Max.  
 Amplitude Balance: ± 1.0 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:                0.75 lbs.  
 Size:                    4.25 x 2.88 x 1.0"

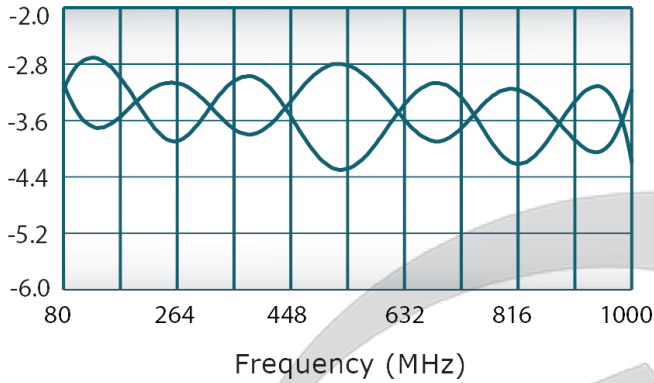
**Connector Configurations:**

Model	Sum Port (J1)	0°, -90° (J2,J3)	Ext. Load Port
QH8911-10	N Female	N Female	Not Applicable
QH8911-12	N Female	SMA	Not Applicable
QH8911-102	SMA	SMA	Not Applicable

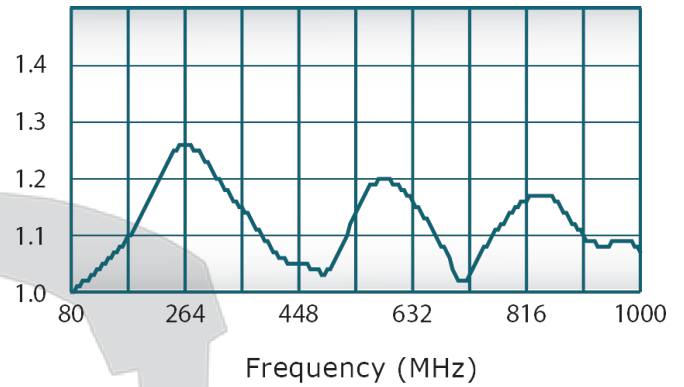
**Werlatone's** breakthrough technology allows us to build our existing line of Broadband 3 dB High Power 90° Hybrid Couplers. Connectorized 3 dB 90° Hybrid Coupler models are available with a choice of connectors. Several of our existing High Power 3 dB 90° RF Couplers are three port designs, wherein 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):**

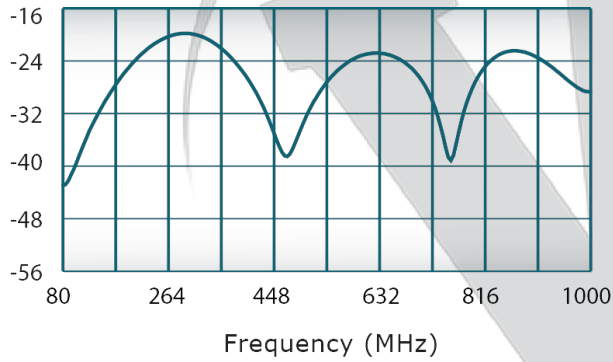
Coupling:



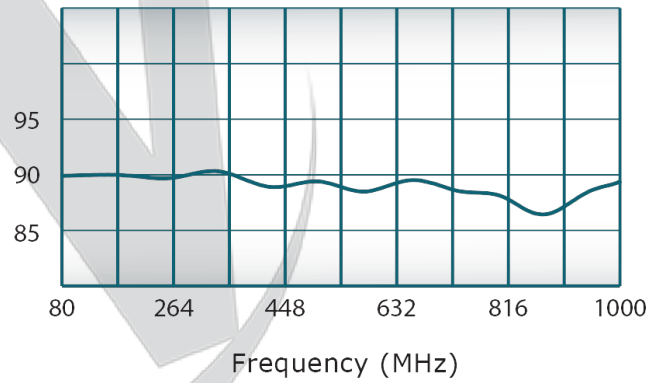
VSWR:



Isolation:

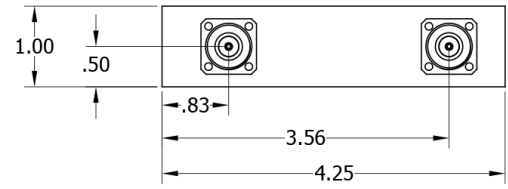
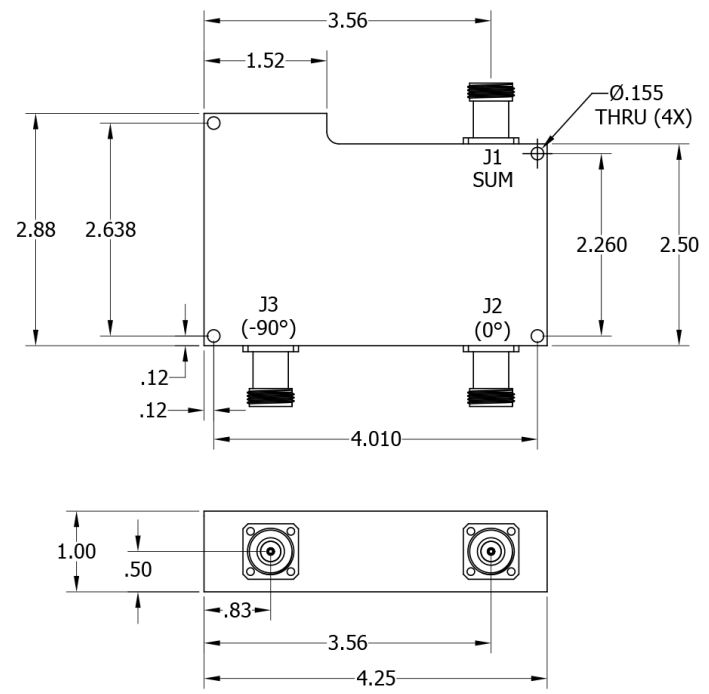


Phase Balance:



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REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
4/7/2011	-	INITIAL RELEASE	NH	BW	BW



UNLESS OTHERWISE SPECIFIED		DWN	DATE	<b>WERLATONE   SINCE 1965</b>	17 Jon Barrett Rd Patterson, NY 12563		
INTERPRET DRAWING IAW MIL-STD-100 DIMENSIONING PER ASME Y14.5M-2009 PARANETICAL INFO FOR REF ONLY DIMENSIONS ARE IN INCHES TOLERANCES: ANGLE ± 2° 3 PL DECIMALS ± .005 2 PL DECIMALS ± .015 THIRD ANGLE PROJECTION		NH	04/07/11		TITLE		
		CHK	DATE	<b>OUTLINE</b>			
		BW	04/07/11				
		ENGR	DATE	USED ON			
		BW	04/07/11				
		QA	DATE				
		RLSE	DATE	SIZE	CAGE CODE	DWG NO	REV
				A	28812	20737-500	-
				SCALE	1:2		SHEET 1 OF 1

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