


PRODUCT DATA SHEET
QH8859
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:	0.65 dB Max.
VSWR:	1.40:1 Max.
Phase Balance:	90° ± 6° Max.
Amplitude Balance:	± 1.0 dB Max.
Isolation:	16 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:	14.2 oz.
Size:	3.5 x 3.2 x 1.06"

Connector Configurations:

Model	Sum Port (J1)	0°, -90° (J2,J3)	ISO Port (J4)
QH8859-10	N Female	N Female	N Female
QH8859-12	N Female	N Female	SMA
QH8859-102	SMA	SMA	SMA
QH8859-113	BNC	BNC	BNC

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

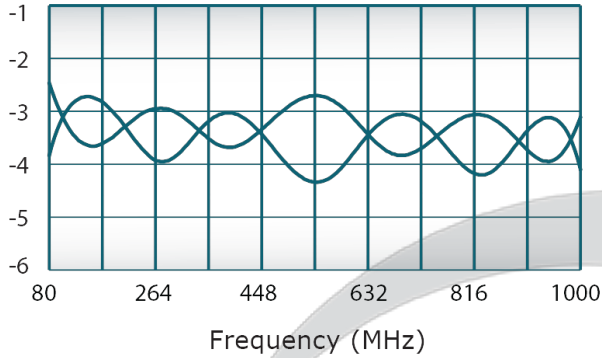


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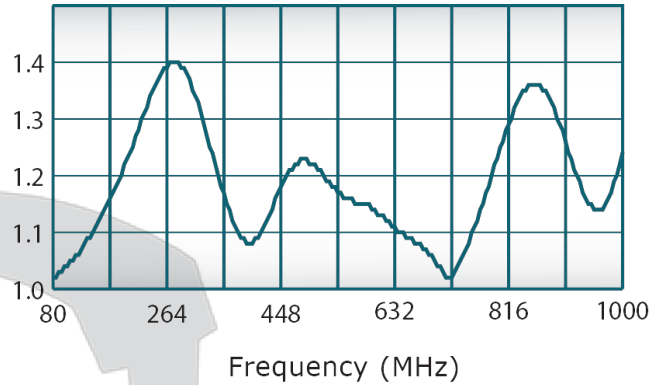
QH8859

Performance Data (Specifications subject to change without notice):

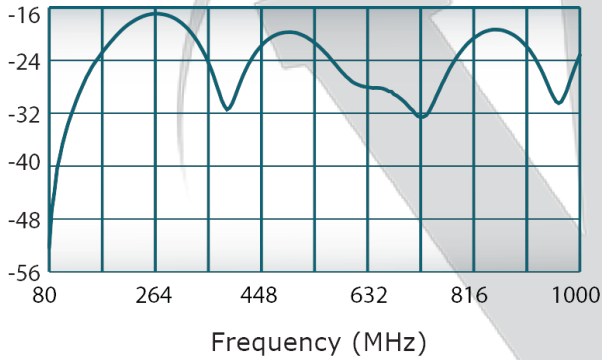
Coupling:



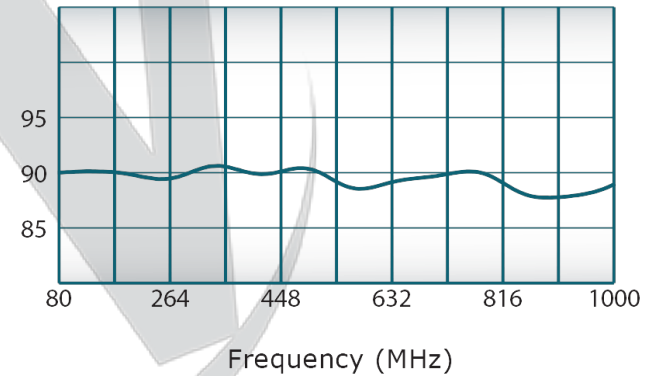
VSWR:



Isolation:



Phase Balance:



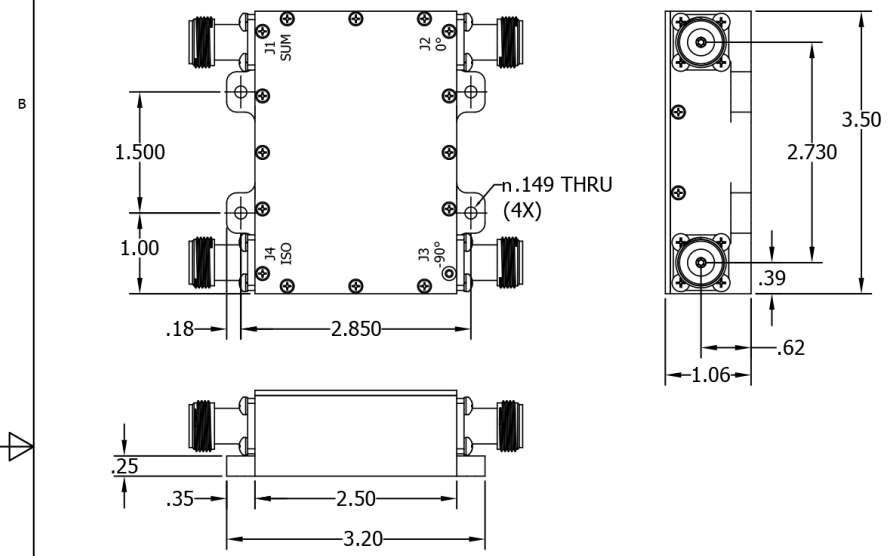
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REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
2/21/2011	-	INITIAL RELEASE	NH	BW	BW



J1	J2	J3	J4
Sum (S)	-3 dB \otimes Q	-3 dB \otimes Q-90	Isolated (Δ)
-3 dB \otimes Q	Sum (S)	Isolated (Δ)	-3 dB \otimes Q-90
-3 dB \otimes Q-90	Isolated (Δ)	Sum (S)	-3 dB \otimes Q
Isolated (Δ)	-3 dB \otimes Q-90	-3 dB \otimes Q	Sum (S)

UNLESS OTHERWISE SPECIFIED		DWN	DATE	WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IAW MIL-STD-100 DIMENSIONING PER ASME Y14.5M-2009 PARANTHETICAL INFO FOR REF ONLY DIMENSIONS ARE IN INCHES TOLERANCES: ANGLE \pm 2° 3 PL DECIMALS \pm .005 2 PL DECIMALS \pm .015		NH	02/21/11		
THIRD ANGLE PROJECTION		CHK	DATE	TITLE OUTLINE	
		BW	02/21/11		
		ENGR	DATE	USED ON	
		BW	02/21/11		
		QA	DATE	SIZE A	
		RLSE	DATE	CAGE CODE 28812	DWG NO 20725-500
				SCALE	REV -
				SHEET 1 OF 1	

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