


**PRODUCT DATA SHEET**
**QH9141**
**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 &amp; Surface Mount

**Electrical Specifications:**

Frequency:	150 - 2000 MHz
Power:	150 W CW
Insertion Loss:	0.85 dB Max.
VSWR:	1.40:1 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:	8 oz.
Size:	2.0 x 2.0 x 1.06"

**Connector Configurations:**

<b>Model</b>	<b>Sum Port (J1)</b>	<b>0°, 90° (J2,J3)</b>	<b>Ext. Load Port</b>
QH9141-10	N Female	N Female	N Female
QH9141-12	N Female	SMA	SMA
QH9141-102	SMA	SMA	SMA
QH9141-300	TNC	TNC	TNC

**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.



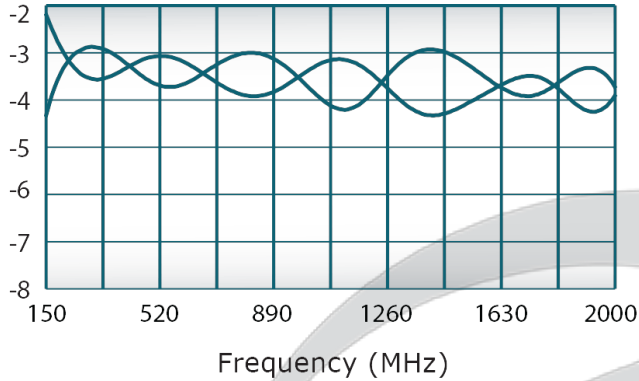
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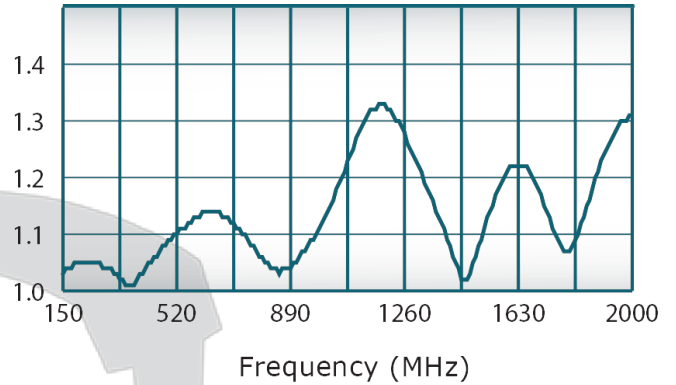
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com


**Performance Data (Specifications subject to change without notice):**

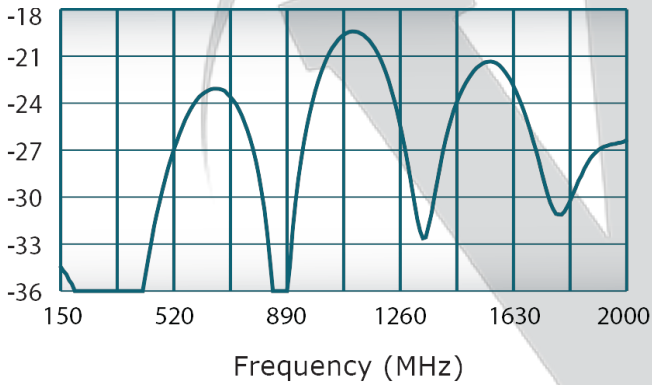
Coupling:



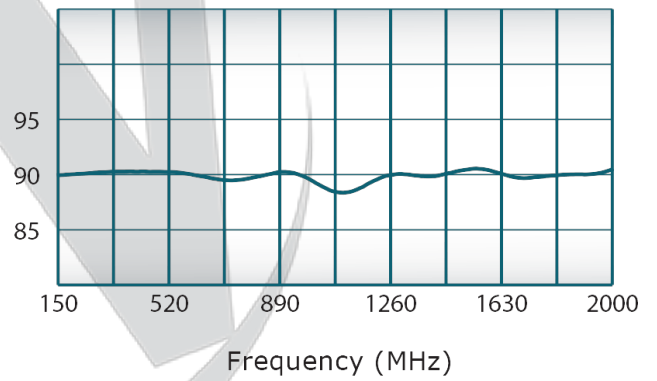
VSWR:



Isolation:

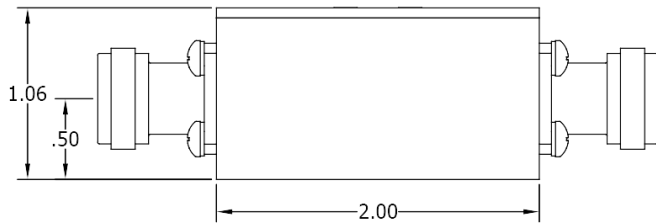
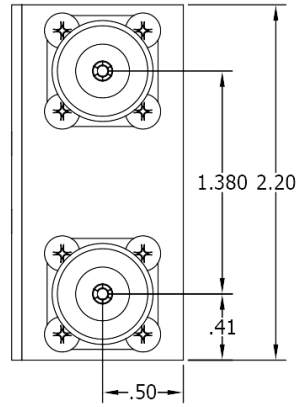
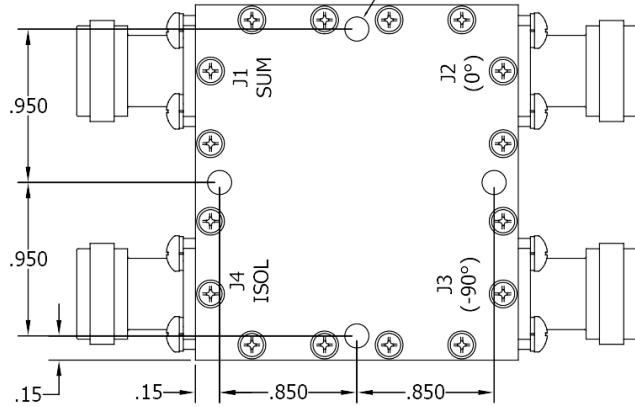


Phase Balance:



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n.149 THRU (4X)



REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	INITIAL RLS	10/7/2011	BW

UNLESS OTHERWISE SPECIFIED		DWN	DATE	WERLATONE   SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563			
<ul style="list-style-type: none"> <li>• INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100</li> <li>• DIMENSIONS PER ASME Y14.5M-2009</li> <li>• PARENTHESES INFO FOR REF ONLY</li> <li>• DIMENSIONS ARE IN INCHES</li> <li>• DIMENSIONAL LIMITS APPLY BEFORE PROCESSES</li> </ul>		NH	10/6/2011				
<ul style="list-style-type: none"> <li>• TOLERANCES: ANGLES ± 2°</li> <li>                  XXX ± .005</li> <li>                  XX ± .015</li> </ul>		CHK	DATE	TITLE			
<ul style="list-style-type: none"> <li>• HOLE TOLERANCES: ± .004/- .001</li> <li>• REMOVE ALL BURRS AND SHARP EDGES</li> <li>• R.01 MAX</li> <li>• CONCENTRICITY MACHINED DIA: .002 FIM</li> <li>• MACHINE TOOL MISMATCH: .003 MAX</li> </ul>		BW	10/7/2011	OUTLINE			
NEXT ASSY	USED ON	ENGR	DATE	SIZE	CAGE CODE	DWG NO	REV
APPLICATION		BW	10/7/2011	A	28812	20810-500	-
THIRD ANGLE PROJECTION		MFGR	DATE	SCALE	SHEET 1 OF 1		
		QA	DATE				
		RLSE	DATE				

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