
**PRODUCT DATA SHEET**
**QH9044**
**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:	100 - 512 MHz
Power:	400 W CW
Insertion Loss:	0.4 dB Max.
VSWR:	1.30:1 Max.
Phase Balance:	90° ± 5° Max.
Amplitude Balance:	± 0.6 dB Max.
Isolation:	20 dB Min.

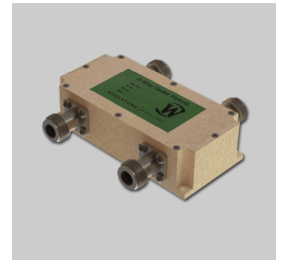
**Mechanical Specifications:**

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:	4.0 x 1.92 x 1.1"

**Connector Configurations:**

Model	Sum Port (J1)	0°, 90° (J2,J3)	Ext. Load Port
QH9044-10	N Female	N Female	N Female
QH9044-12	N Female	SMA	SMA
QH9044-102	SMA	SMA	SMA
QH9044-300	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.

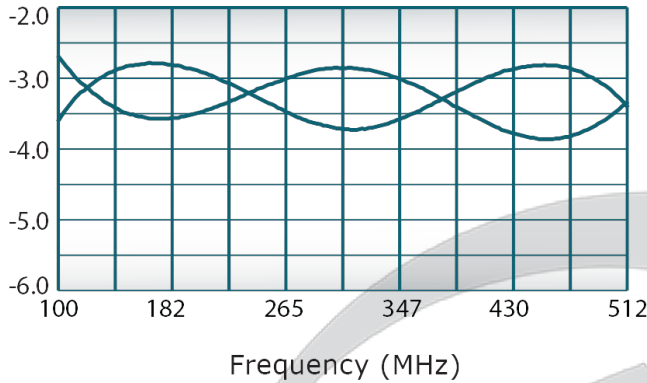


## PRODUCT DATA SHEET

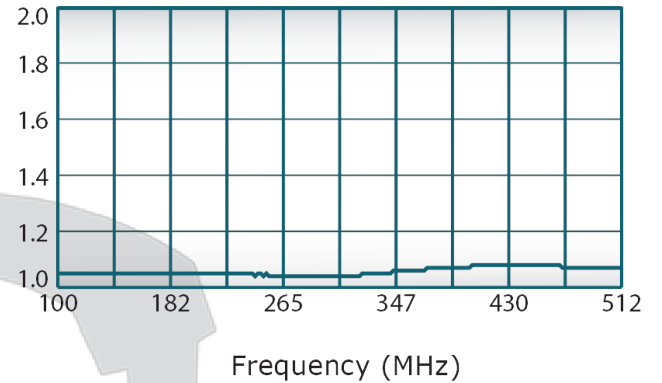
QH9044

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

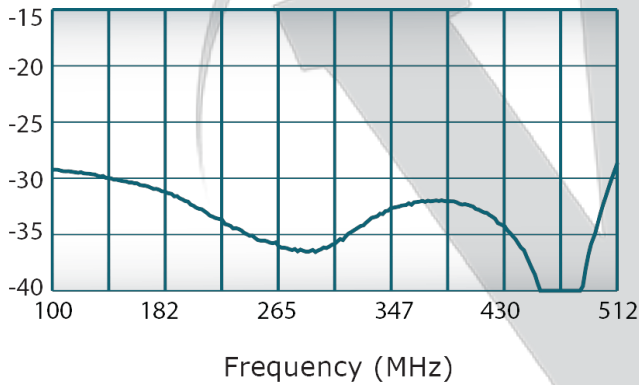
Coupling:



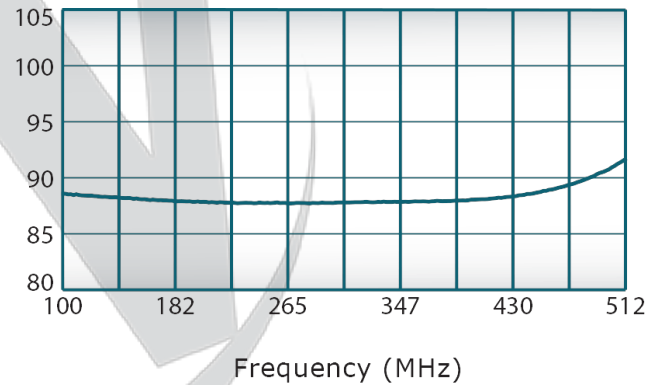
VSWR:



Isolation:



Phase Balance:



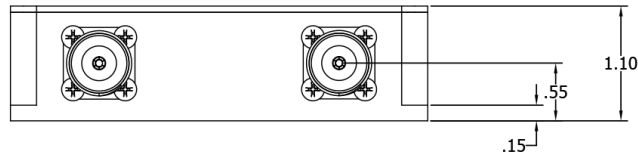
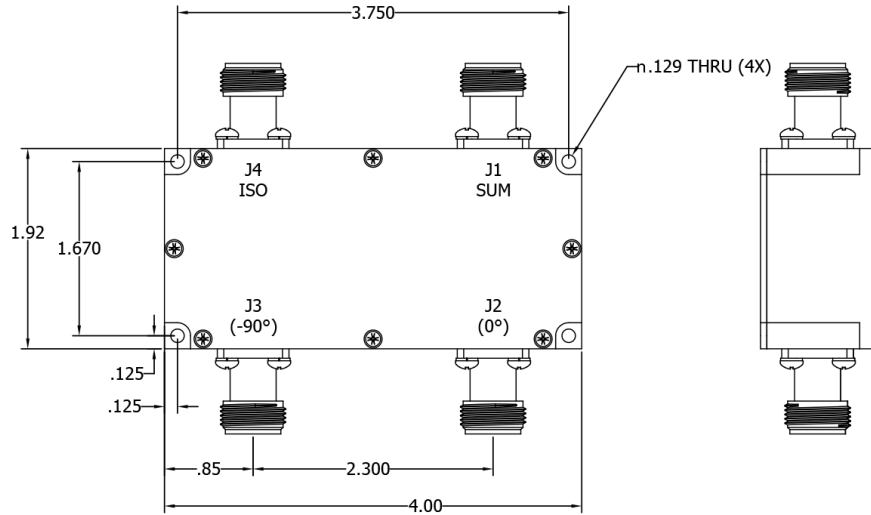
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Werlatone, Inc.

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REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	6/17/2011	BW



UNLESS OTHERWISE SPECIFIED		DWN	DATE	 WERLATONE SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563
• INTERPRET DRAWING LAW MIL-STD-100 • DIMENSIONING PER ASME Y14.5M-2009 • DIMENSIONAL LIMITS APPLY BEFORE PROCESSING • DIMENSIONS ARE IN INCHES • DIMENSIONAL LIMITS APPLY BEFORE PROCESSING • TOLERANCES: ANGLES ±2° 3 PL. ± .005 2 PL. ± .015 • REMOVE ALL BURRS AND SHARP EDGES R1.2 MAX • CONCENTRICITY MACHINED DIA: .002 F3M • MACHINE TOOL MISMATCH .003 MAX THIRD ANGLE PROJECTION		GP	6/17/2011	
NEXT ASSY		CHK	DATE	TITLE
USED ON		NH	7/7/2011	
APPLICATION		ENGR	DATE	SIZE
		BW	7/7/2011	CAGE CODE
		MFR	DATE	DWG NO
		QA	DATE	B 2881220781-500
		RLSE	DATE	SCALE
				1:1
				REV
				-
				SHEET 1 OF 1

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