

## PRODUCT DATA SHEET

QH9030

### 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: 100 - 512 MHz  
 Power: 400 W CW  
 Insertion Loss: 0.4 dB Max.  
 VSWR: 1.30:1 Max.  
 Phase Balance:  $90^\circ \pm 5^\circ$  Max.  
 Amplitude Balance:  $\pm 0.6$  dB Max.  
 Isolation: 20 dB Min.

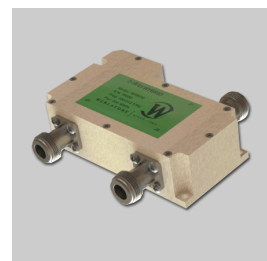
### Mechanical Specifications:

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 2.42 x 1.1"

### Connector Configurations:

Model	Sum Port (J1)	Inputs (J2,J3)	Ext. Load Port
QH9030-10	N Female	N Female	Not Applicable
QH9030-12	N Female	SMA	Not Applicable
QH9030-300	TNC	TNC	Not Applicable
QH9030-302	TNC	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.

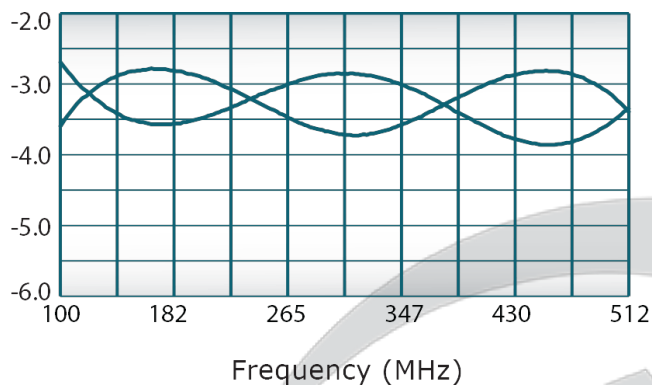


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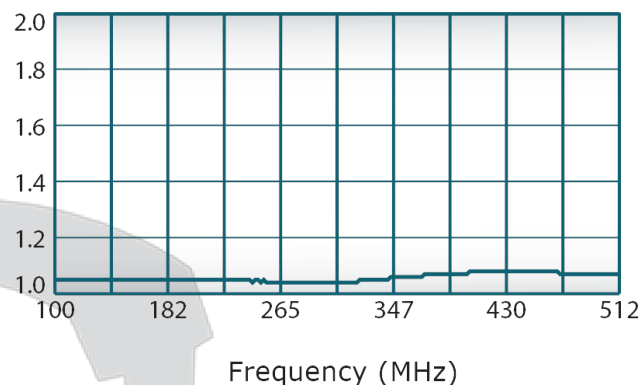
QH9030

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

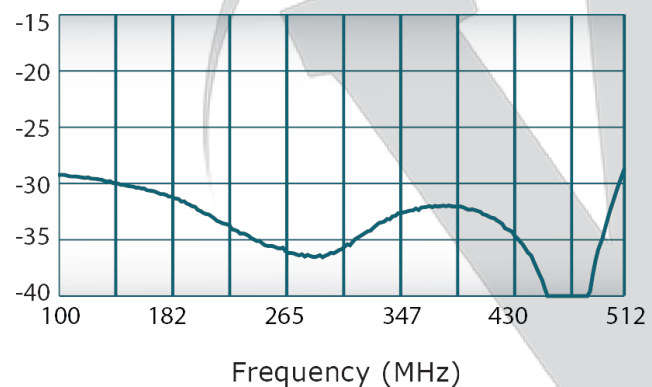
Coupling:



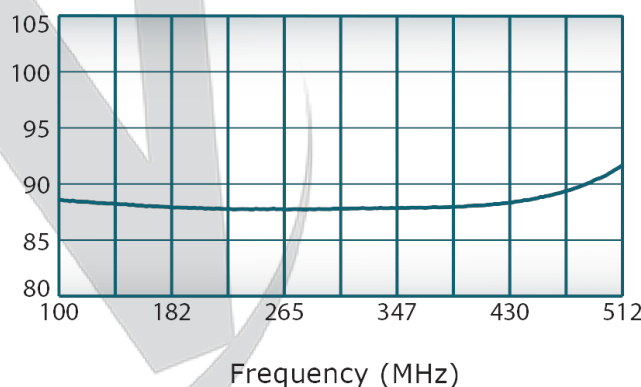
VSWR:



Isolation:

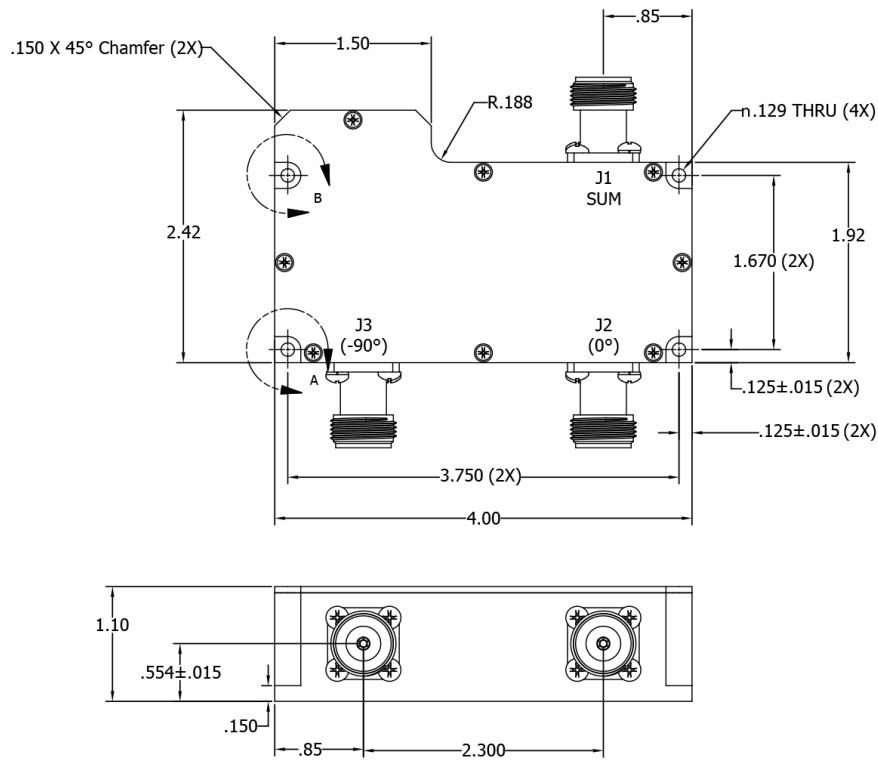


Phase Balance:



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



UNLESS OTHERWISE SPECIFIED				DRAWN	DATE	WERLATONE SINCE 1965		17 Jon Barrett Rd
• INTERPRET DRAWING IN ACCORDANCE WITH ISO 1000				GP	6/17/2011			Patterson, NY 12563
• DIMENSIONS ARE IN INCHES				CHK	DATE			
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• DIMENSIONS ARE IN INCHES				ENGR	DATE			
• DIMENSIONS ARE IN INCHES				INPR	DATE			
• DIMENSIONS ARE IN INCHES				QA	DATE			
• DIMENSIONS ARE IN INCHES				RELSE	DATE			
• DIMENSIONS ARE IN INCHES						SIZE	CAGE CODE	DWG NO
• DIMENSIONS ARE IN INCHES						B	28812	20775-500
• DIMENSIONS ARE IN INCHES						SCALE	1:1	
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