
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 & 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" |

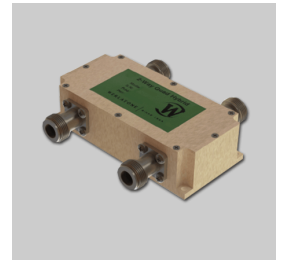
Connector Configurations:

| 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.

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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

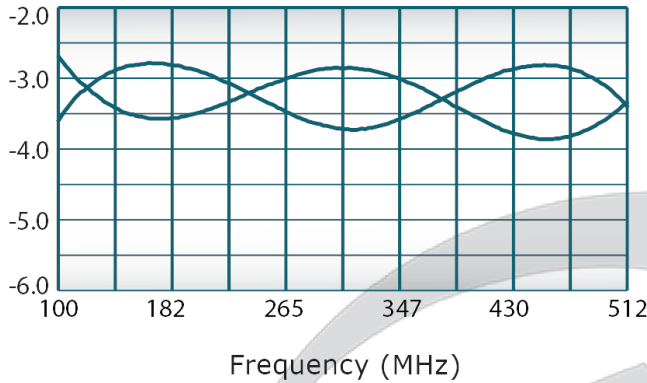


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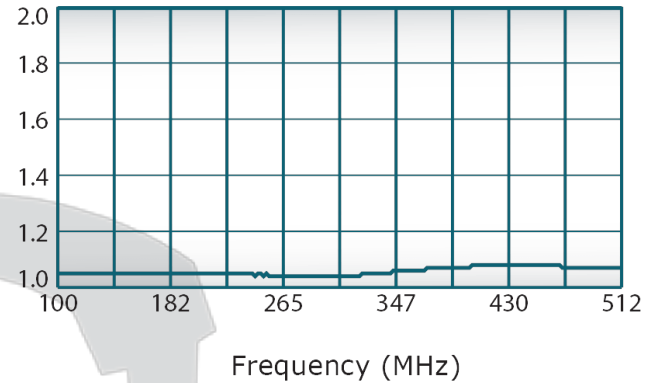
QH9044

Performance Data (Specifications subject to change without notice):

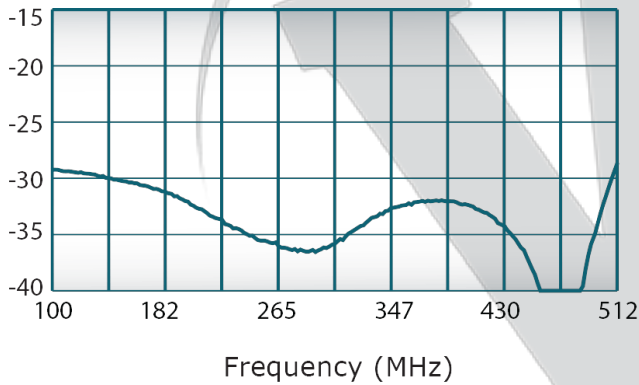
Coupling:



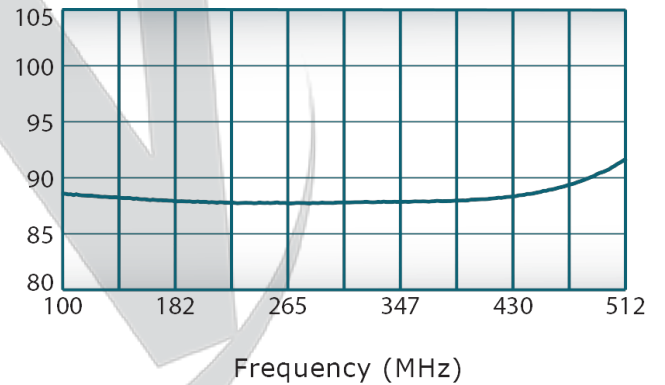
VSWR:



Isolation:



Phase Balance:



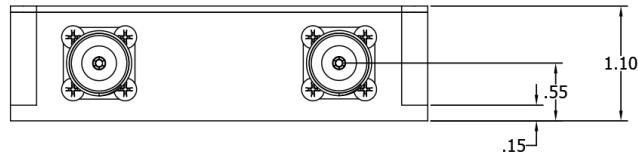
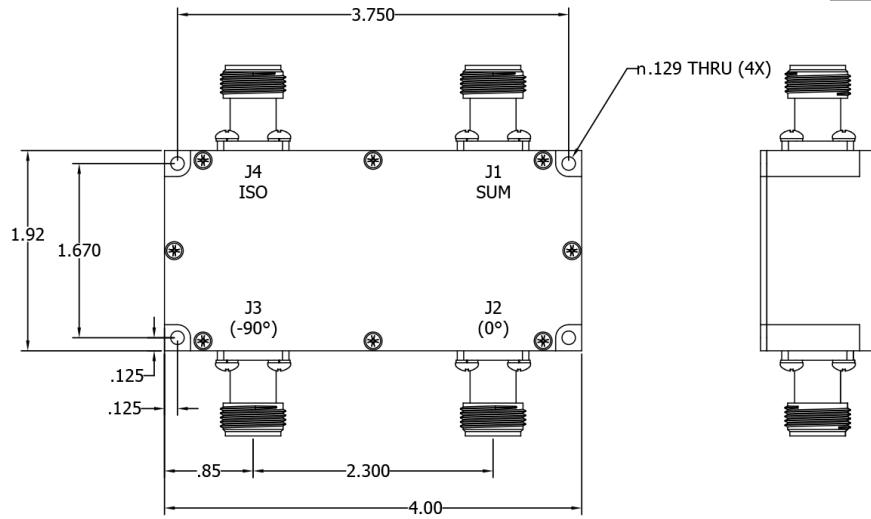
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| REVISION HISTORY | | | |
|------------------|-----------------|-----------|----------|
| REV | REVISION RECORD | DATE | APPROVED |
| - | INITIAL RELEASE | 6/17/2011 | BW |
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|--|--|------|-----------|--|
| 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 • TOLERANCES: ANGLES ±2° 3 PL. ± .005 2 PL. ± .015 • REMOVE ALL BURRS AND SHARP EDGES R1.0 MAX • CONCENTRICITY MACHINED DIA: .002 FIM • MACHINE TOOL MISMATCH .003 MAX THIRD ANGLE PROJECTION | | GP | 6/17/2011 | |
| NEXT ASSY | | CHK | DATE | TITLE |
| USED ON | | NH | 7/7/2011 | B |
| APPLICATION | | ENGR | DATE | SIZE |
| | | BW | 7/7/2011 | CAGE CODE |
| | | MPGR | DATE | DWG NO |
| | | QA | DATE | 2881220781-500 |
| | | RLSE | DATE | SCALE |
| | | | | 1:1 |
| | | | | REV |
| | | | | - |
| | | | | SHEET 1 OF 1 |

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