
PRODUCT DATA SHEET
QH7644
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 Excellent Amplitude Balance

Electrical Specifications:

| | |
|--------------------|----------------|
| Frequency: | 500 - 2500 MHz |
| Power: | 150 W CW |
| Insertion Loss | 0.55 dB Max. |
| VSWR: | 1.35:1 Max. |
| Phase Balance: | ± 5° dB Max. |
| Amplitude Balance: | ± 0.6 dB Max. |
| Isolation: | 19 dB Min. |

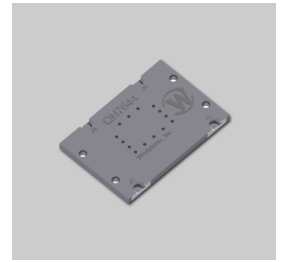
Mechanical Specifications:

| | |
|------------------|---|
| Type: | Surface Mount |
| Plating Options: | QH7644-Sn: Immersion Tin (RoHS) QH7644-Ag: Immersion Silver (RoHS) QH7644-Au: ENIG (RoHS) |
| Size: | 1.65 x 1.1 x 0.09" |
| Weight: | 0.1 lb |

Port Configurations:

| J1 | J2 | J3 | J4 |
|--------------|--------------|--------------|--------------|
| Sum | -3, dB, 0° | -3, dB, -90° | Isolated |
| -3, dB, 0° | Sum | Isolated | -3, dB, -90° |
| -3, dB, -90° | Isolated | Sum | -3, dB, 0° |
| Isolated | -3, dB, -90° | -3, dB, 0° | Sum |

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.

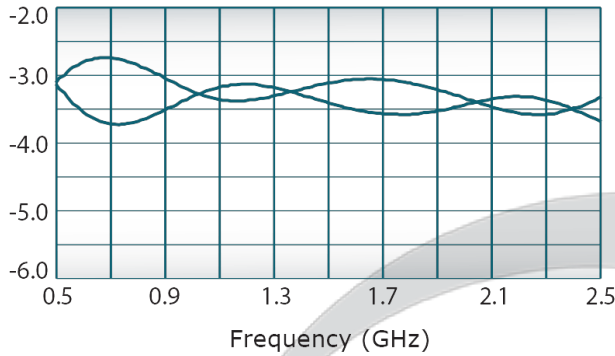


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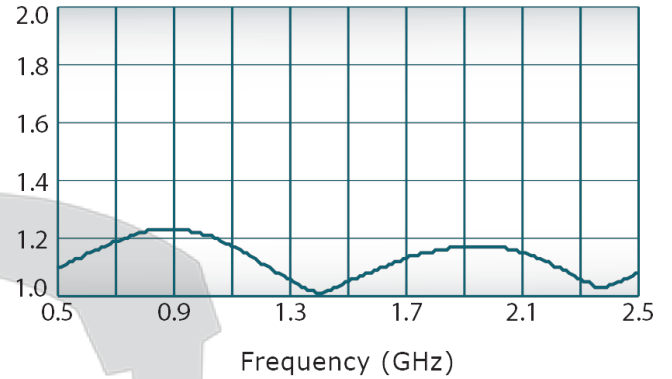
QH7644

Performance Data (Specifications subject to change without notice):

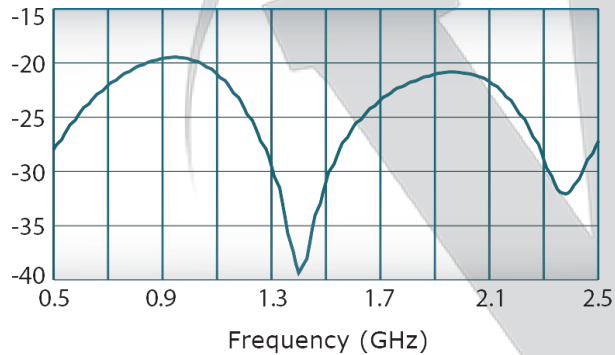
Coupling:



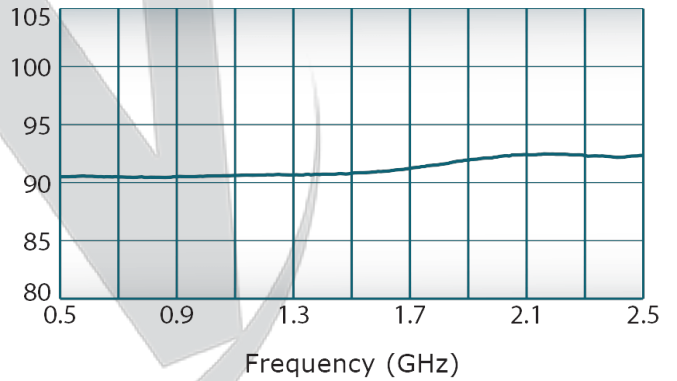
VSWR:



Isolation:



Phase Balance:



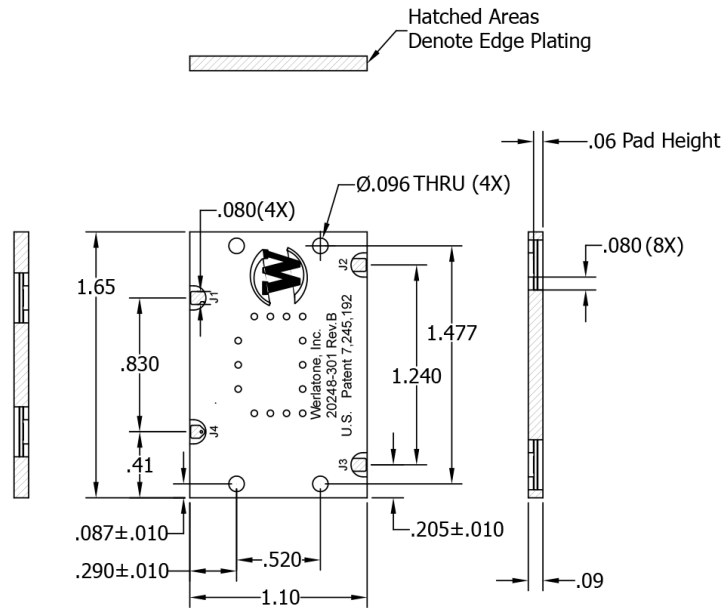
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Werlatone, Inc.

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| REVISION HISTORY | | | | | |
|------------------|-----|-----------------|------|-----|------|
| DATE | REV | REVISION RECORD | AUTH | CHK | APPV |
| 8/30/2006 | - | INITIAL RELEASE | GP | NH | BW |
| 10/6/2009 | A | ECN 4979 | GP | NH | BW |
| 9/8/2010 | B | ECN 5313 | GP | NH | BW |



| | | | | | |
|--|------|---------|--------------------------|--------------|--|
| UNLESS OTHERWISE SPECIFIED INTERPRET DRAWING LAW MIL-STD-100 DIMENSIONING PER ASME Y14.5M-2009 PARAMETRICAL INFO FOR REF ONLY DIMENSIONS ARE IN INCHES TOLERANCES: ANGLE ± 2° 3 PL DECIMALS ± .005 2 PL DECIMALS ± .015 THIRD ANGLE PROJECTION | DWN | DATE | W WERLATONE SINCE 1965 | | 17 Jon Barrett Rd Patterson, NY 12563 |
| | GP | 8/30/06 | TITLE | | |
| | CHK | DATE | USED ON | | |
| | ENGR | DATE | SCALE | | |
| QA | DATE | SIZE | CAGE CODE | DWG NO | REV |
| RLSE | DATE | A | 28812 | 20248-500 | B |
| SCALE | | 1:1 | | SHEET 1 OF 1 | |

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