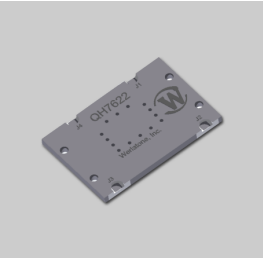
WERLATONE

Model QH7622
90° Hybrids Surface Mount (SMT) & Drop



**PRODUCT DATA SHEET** **QH7622**

**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 - 3000 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: | QH7622-Sn: Immersion Tin (RoHS)<br>QH7622-Ag: Immersion Silver (RoHS)<br>QH7622-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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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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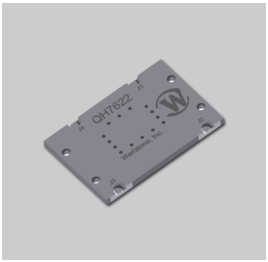
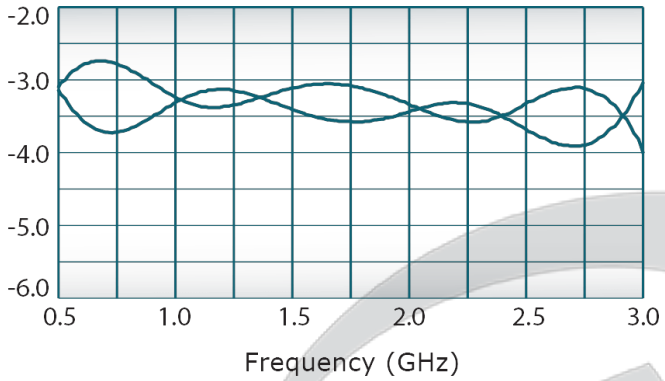


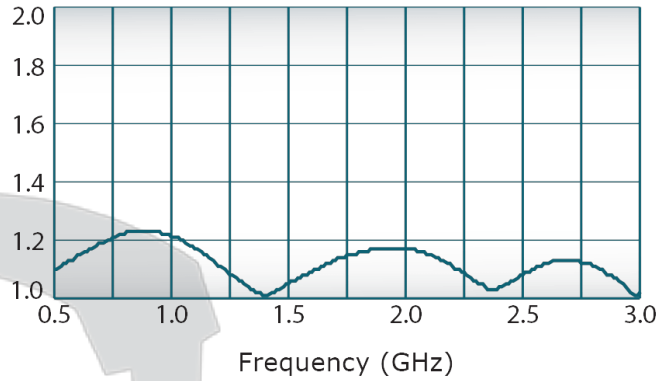


## Performance Data (Specifications subject to change without notice):

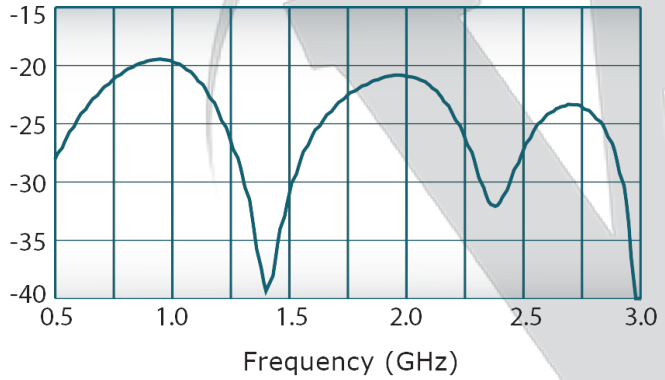
Coupling:



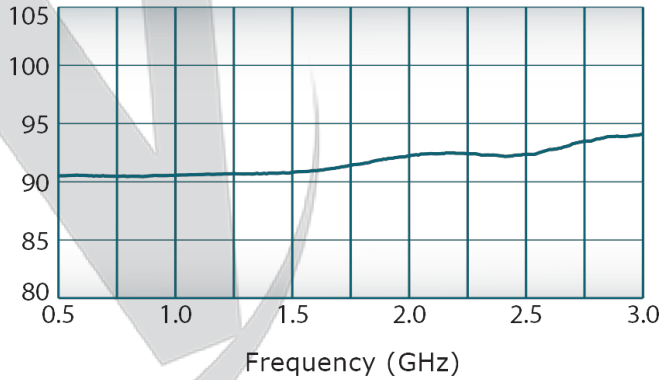

VSWR:




Isolation:




Phase Balance:

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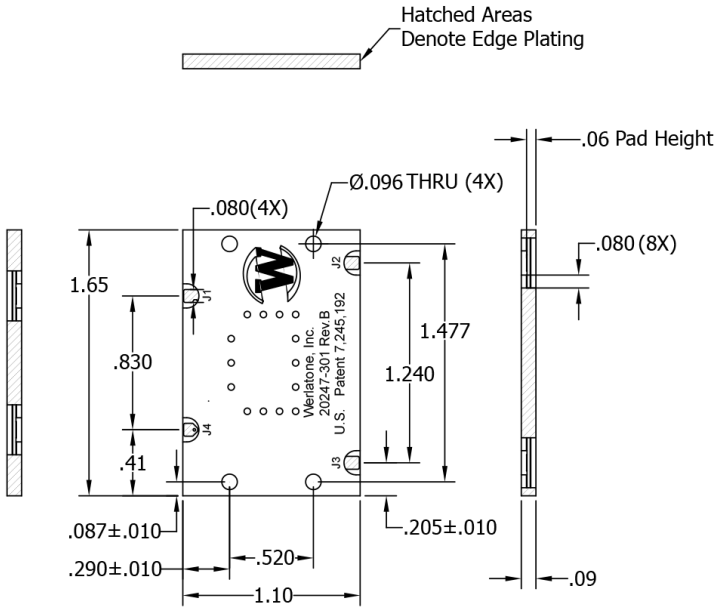
| REVISION HISTORY | | | | | |
|---|---|---|---|---|---|
| DATE | REV | REVISION RECORD | AUTH | CHK | APPV |
| 8/30/2006 | - | INITIAL RELEASE | GP | NH | BW |
| 10/6/2009 | A | ECN 4977 | GP | NH | BW |
| 9/8/2010 | B | ECN 5225 | GP | NH | BW |
| 3/8/11 | C | ECN 5314 | GP | NH | BW |




UNLESS OTHERWISE SPECIFIED
- INTERPRET DRAWING IAW MIL-STD-100
- DIMENSIONING PER ASME Y14.5M-2009
- PARANTHETICAL INFO FOR REF ONLY
- DIMENSIONS ARE IN INCHES
- TOLERANCES: ANGLE ± 2°
  3 PL DECIMALS ± .005
  2 PL DECIMALS ± .015

THIRD ANGLE PROJECTION

| | | |
|---|---|---|
| DWN | GP | DATE 8/30/06 |
| CHK | | DATE |
| ENGR | | DATE |
| QA | | DATE |
| RLSE | | DATE |

WERLATONE | SINCE 1965
17 Jon Barrett Rd
Patterson, NY 12563

TITLE

USED ON

| SIZE | CAGE CODE | DWG NO | REV |
|---|---|---|---|
| A | 28812 | 20247-500 | C |

SCALE 1:1 SHEET 1 OF 1

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