
PRODUCT DATA SHEET
QH8540
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: | 20-520 MHz |
| Power: | 250 W CW |
| Insertion Loss: | 0.6 dB Max. |
| VSWR: | 1.30:1 Max. |
| Phase Balance: | 90° ± 10° Max. |
| Amplitude Balance: | ± 0.3 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: | 8 oz. |
| Size: | 2.7 x 2.7 x 0.9" |

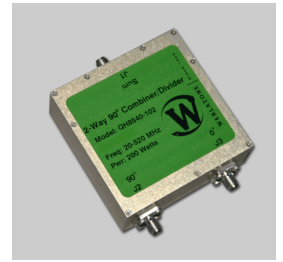
Connector Configurations:

| Model | Sum Port (J1) | 90°, 0° (J2,J3) | Ext. Load Port |
|------------|---------------|-----------------|----------------|
| QH6031-102 | SMA Female | SMA Female | Non 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.

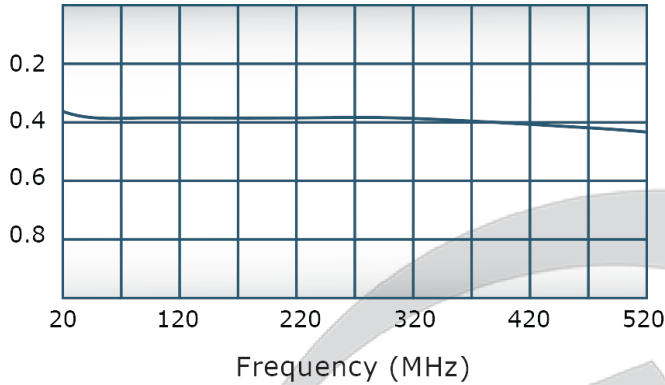
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

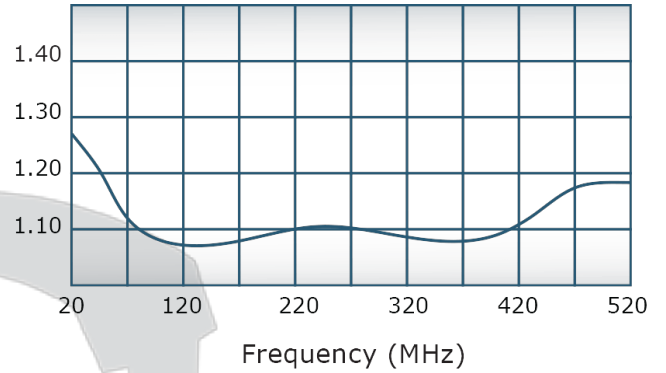


Performance Data (Specifications subject to change without notice):

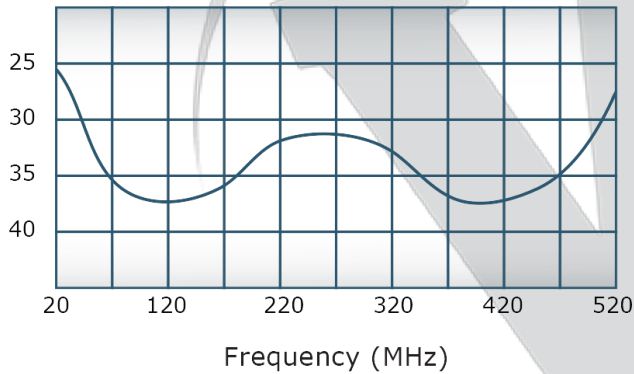
Insertion Loss:



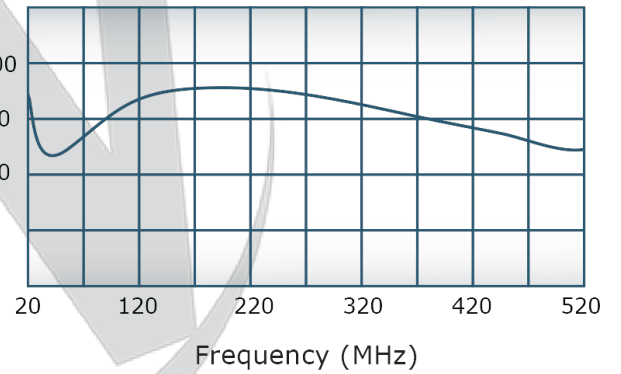
VSWR:



Isolation:



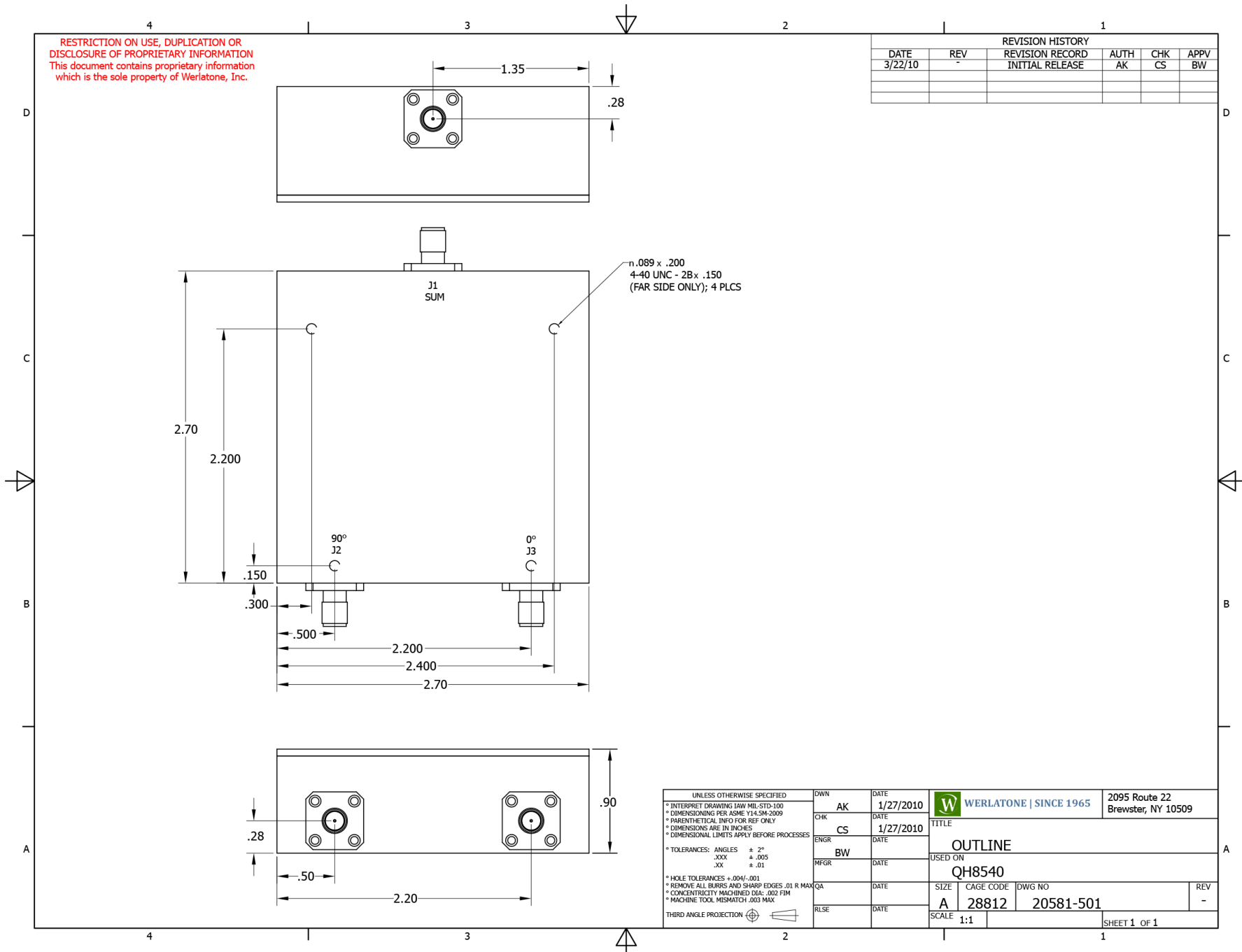
Phase Balance:



Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of

Werlatone, Inc.

Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com



RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION
This document contains proprietary information which is the sole property of Werlatone, Inc.

| REVISION HISTORY | | | | | |
|------------------|-----|-----------------|------|-----|------|
| DATE | REV | REVISION RECORD | AUTH | CHK | APPV |
| 3/22/10 | - | INITIAL RELEASE | AK | CS | BW |
| | | | | | |
| | | | | | |

UNLESS OTHERWISE SPECIFIED
 * INTERPRET DRAWING IAW MIL-STD-100
 * DIMENSIONING PER ASME Y14.5M-2009
 * PARENTHEetical INFO FOR REF ONLY
 * DIMENSIONS ARE IN INCHES
 * DIMENSIONAL LIMITS APPLY BEFORE PROCESSES
 * TOLERANCES: ANGLES ± 2°
 .XXX ± .005
 .XX ± .01
 * HOLE TOLERANCES +.004/-.001
 * REMOVE ALL BURRS AND SHARP EDGES .01 R MAX
 * CONCENTRICITY MACHINED DIA: .002 FIM
 * MACHINE TOOL MISMATCH .003 MAX
 THIRD ANGLE PROJECTION

| | | | | |
|------|----|------|-----------|---|
| DWN | AK | DATE | 1/27/2010 | WERLATONE SINCE 1965 2095 Route 22 Brewster, NY 10509 |
| CHK | CS | DATE | 1/27/2010 | |
| ENGR | BW | DATE | | TITLE |
| MFR | | DATE | | USED ON |
| QA | | DATE | | QH8540 QH8540 |
| RLSE | | DATE | | SIZE A CAGE CODE 28812 DWG NO 20581-501 REV - |
| | | | | SCALE 1:1 SHEET 1 OF 1 |

Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.
 Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com