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: 30 - 520 MHz
- Power: 400 W CW
- Insertion Loss: 0.8 dB Max.
- VSWR: 1.30:1 Max.
- Phase Balance: 90° ± 6° dB Max.
- Amplitude Balance: ± 1.2 dB Max. (35-520 MHz) ± 1.35 dB at 30 MHz
- Isolation: 18 dB Min.

Mechanical Specifications:

- Type: Surface Mount
- Plating Options:
  - QH9056-Pb: Electrodeposited Tin/Lead
  - QH9056-Sn: Immersion Tin (RoHS Compliant)
  - QH9056-Ag: Immersion Silver (RoHS Compliant)
  - QH9056-Au (ENIG)
- Weight: 3.8 oz.
- Size: 4.0 x 1.7 x 0.29"

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

**Coupling:**

![Graph showing coupling variation with frequency.]

**VSWR:**

![Graph showing VSWR variation with frequency.]

**Isolation:**

![Graph showing isolation variation with frequency.]

**Phase Balance:**

![Graph showing phase balance variation with frequency.]

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