

## PRODUCT DATA SHEET

QH10594

### 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 - 1000 MHz  
Power: 150 W CW  
Insertion Loss: 0.8 dB Max.  
VSWR: 1.40:1 Max.  
Phase Balance:  $\pm 12^\circ$  dB Max.  
Amplitude Balance:  $\pm 0.25$  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  
Size: 3.0 x 2.75 x 1.0"

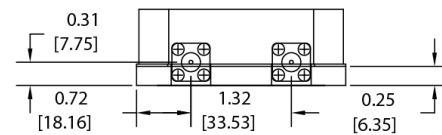
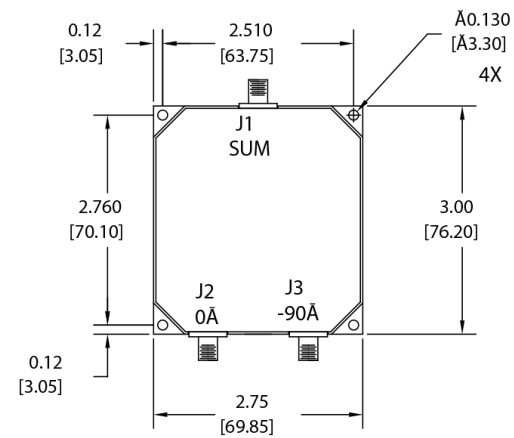
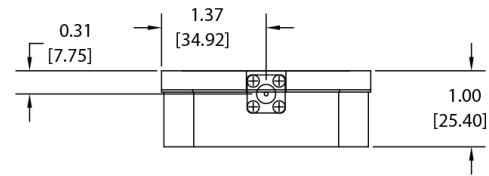
### Connector Configurations:

|              |                      |                         |
|--------------|----------------------|-------------------------|
| <b>Model</b> | <b>Sum Port (J1)</b> | <b>0°, -90° (J2,J3)</b> |
| QH10594-102  | SMA                  | SMA                     |

**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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|-----------------------------|------------------|-----------------------------|------------------------------|--|
| TOLERANCE                   | WERLATONE INC.   |                             |                              |  |
| XX +/- .015<br>XXX +/- .005 |                  | SCALE<br>1:1                | DRAWN BY: PR<br>APPVD BY: CS |  |
| X                           | TITLE<br>OUTLINE |                             |                              |  |
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