

## PRODUCT DATA SHEET

QH12404

### 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: 2000 - 6000 MHz  
Power: 150 W CW  
Insertion Loss: 0.55 dB Max.  
VSWR: 1.35:1 Max.  
Phase Balance:  $\pm 5^\circ$  dB Max.  
Amplitude Balance:  $\pm 0.6$  dB Max.  
Isolation: 18 dB Min.

### Mechanical Specifications:

Type: Surface Mount  
Plating Options: QH12404-Ag: Immersion Silver (RoHS)  
QH12404-Pb: Electrodeposited Tin/Lead  
Size: 1.20 x 0.45 x 0.087"  
Weight: 5 grams

### Port Configurations:

J1	J2	J3	J4
Input	-3 dB, 0°	-3 dB, +90°	Isolated
-3 dB, 0°	Input	Isolated	-3 dB, +90°
-3 dB, +90°	Isolated	Input	-3 dB, 0°
Isolated	-3 dB, +90°	-3 dB, 0°	Input

**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.

**PRODUCT DATA SHEET****QH12404****Performance Data (Specifications subject to change without notice):**

Coupling:

VSWR:

Isolation:

Phase Balance:



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