



## PRODUCT DATA SHEET

QH6313

### 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: 10 - 150 MHz  
Power: 250 W CW  
Insertion Loss: 0.6 dB Max.  
VSWR: 1.30:1 Max.  
Phase Balance:  $90^\circ \pm 5^\circ$  Max.  
Amplitude Balance:  $\pm 0.3$  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: 3 lbs.  
Size: 5.5 x 4.75 x 1.75"

### Connector Configurations:

Model	Sum Port (J1)	Inputs (J2,J3)	Ext. Load Port
QH6313-10	N Female	N Female	Not Applicable
QH6313-12	N Female	SMA	Not Applicable
QH6313-13	N Female	BNC	Not Applicable
QH6313-102	SMA	SMA	Not 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.



# WERLATONE

Model QH6313  
90° Hybrids Connectorized

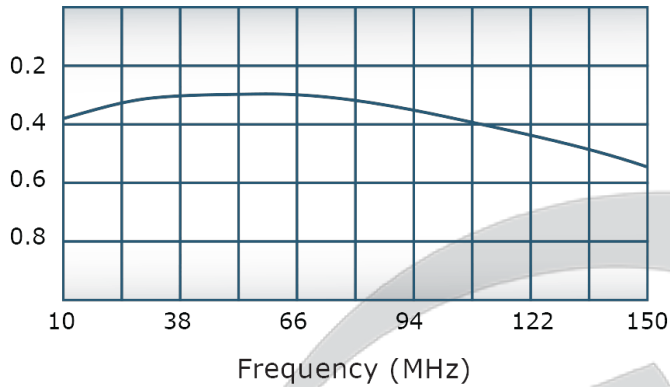


## PRODUCT DATA SHEET

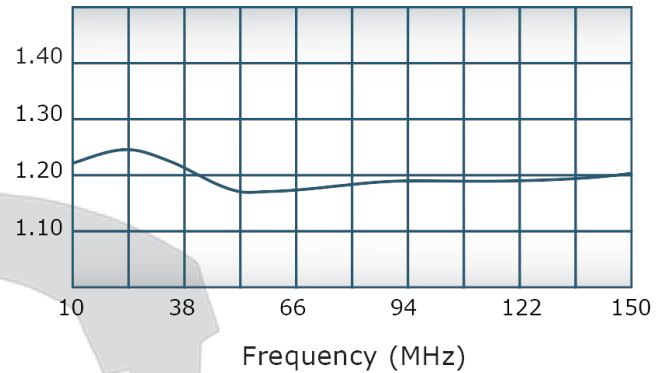
QH6313

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

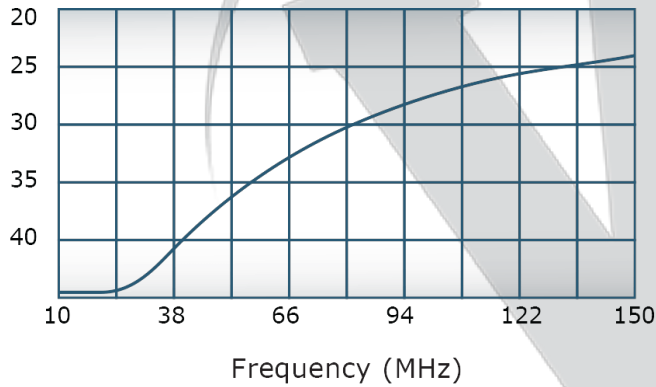
Insertion Loss:



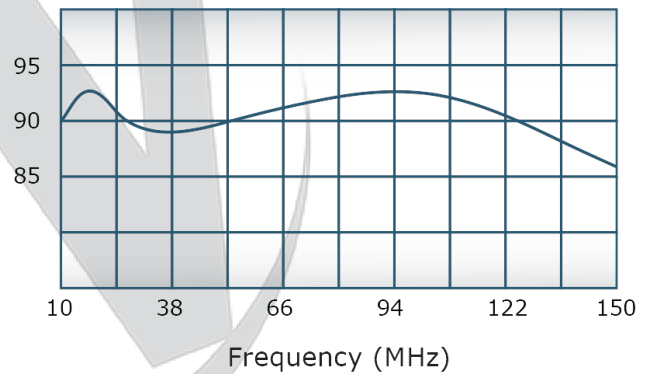
VSWR:



Isolation:



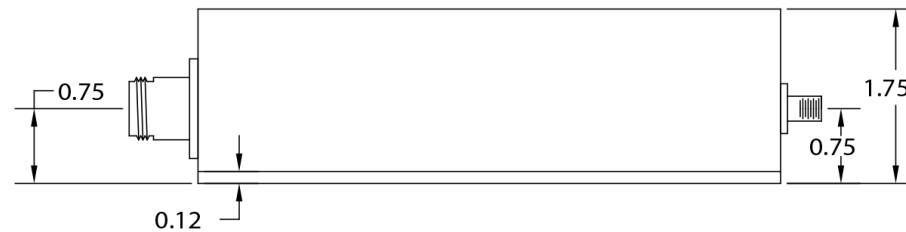
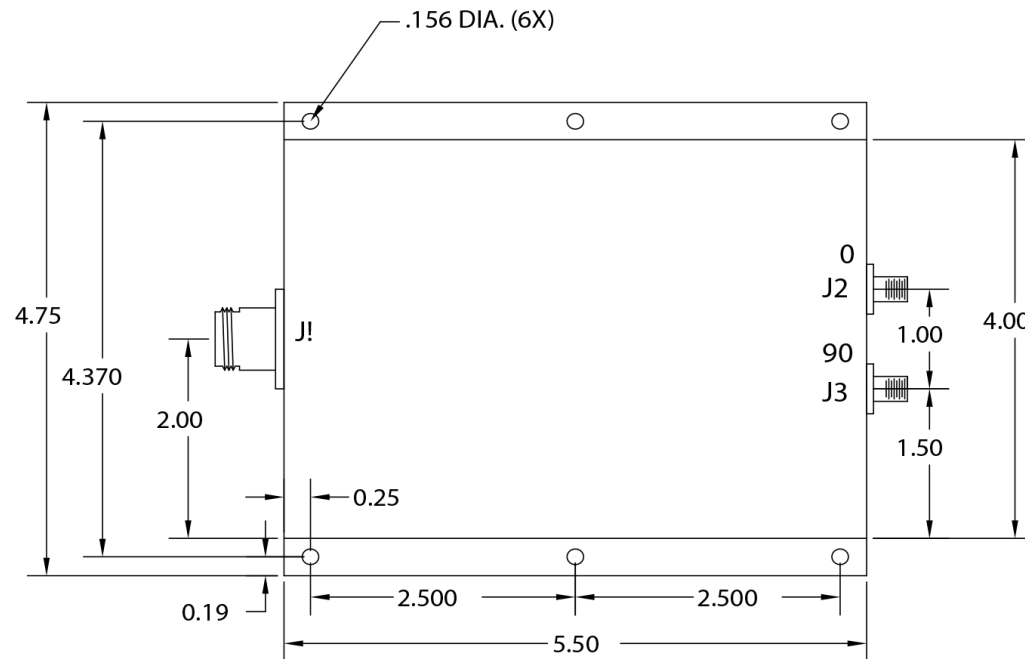
Phase Balance:



**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

DATE	SYM	REVISION RECORD	AUTH	DR	CK



THIS DRAWING CONTAINS INFORMATION  
PROPRIETARY TO WERLATONE INC. AND  
MAY NOT BE USED OR COPIED WITHOUT  
THE WRITTEN CONSENT OF WERLATONE INC.

TOLERANCE	WERLATONE INC.		
XX +/- .015 XXX +/- .005	SCALE	DRAWN BY: RH	APP'D BY:
	TITLE OUTLINE		
	DATE 1/28/02	DRAWING NUMBER 10493-500	

**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