

## PRODUCT DATA SHEET

QH10738

### 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: 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.

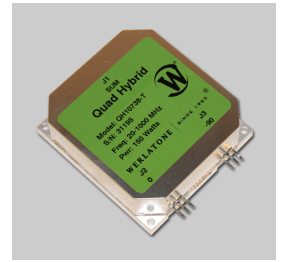
### Mechanical Specifications:

Material: Aluminum 6061-T6  
Surface Finish: Chem. Film Per MIL-DTL-5541F Type II Class 3 (Clear Iridite)  
Operating Temperature:  $-55^\circ\text{C}$  to  $+75^\circ\text{C}$   
Storage Temperature:  $-60^\circ\text{C}$  to  $+85^\circ\text{C}$   
Size: 3.0 x 2.75 x 1.0"

### Port Configurations:

Model	Sum Port (J1)	0°, -90° (J2, J3)
QH10738-T	Tab	Tab

**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.

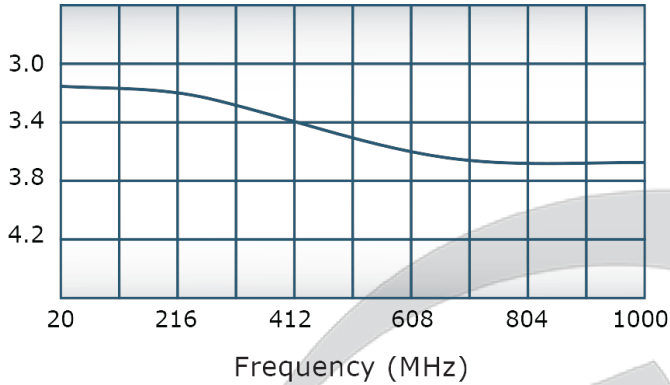


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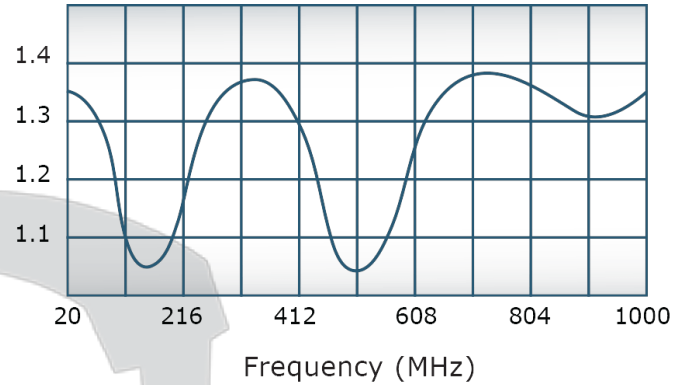
QH10738

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

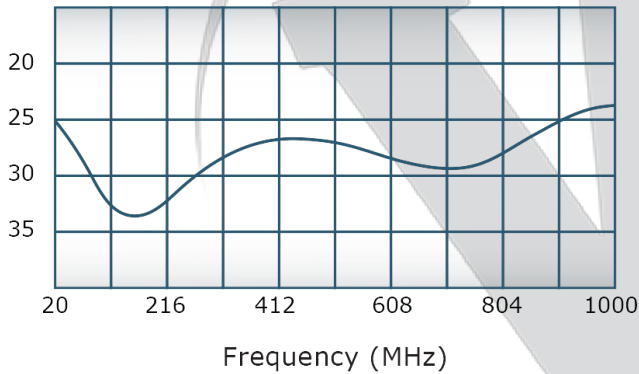
Coupling:



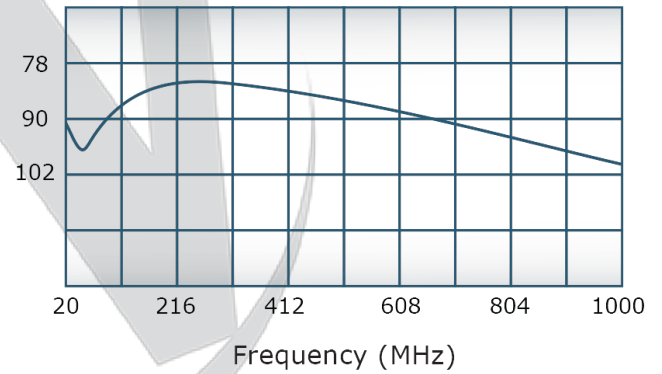
VSWR:



Isolation:



Phase Balance:



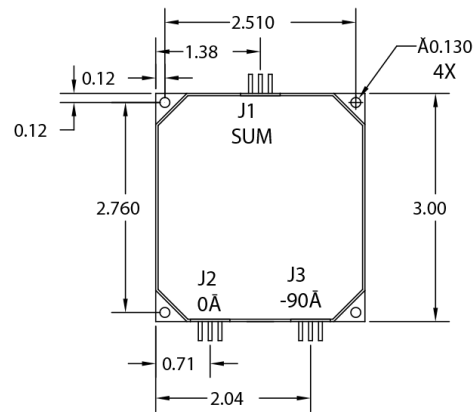
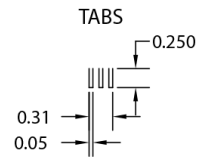
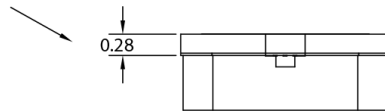
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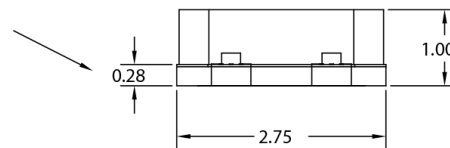
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DATE	SYM	REVISION RECORD	AUTH	DR	CK

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TOLERANCE	WERLATONE INC.			
XX +/- .015 XXX +/- .005	USED ON:	SCALE 1:1	DRAWN BY: PR APPVD BY: CS	
	TITLE <b>OUTLINE</b>			
	DATE 5/26/16	DRAWING NUMBER <b>21388-501</b>		

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