

**Werlatone®** High Power 180° RF Hybrid Combiners/Dividers balance traditional technologies with disruptive microwave techniques. The outcome is a microwave component which provides an order of magnitude improvement over current capabilities. Our newest line of high power, patented 180° RF Hybrid Combiners/Dividers provides an incredible 5:1 bandwidth, while exhibiting exceptionally low loss and superior port-to-port isolation.

**Features:**

High Power      Wide Bandwidths      Small Size      Excellent Amplitude Balance

**Electrical Specifications:**

Frequency:            20 - 1000 MHz  
 Power:                20 W CW  
 Insertion Loss:      1.3 dB Max.  
 VSWR:                1.40:1 Max.  
 Phase Balance:      180° ± 5° Max.  
 Amplitude Balance: ± 0.4 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:                    4.0 x 1.6 x 0.8"

**Connector Configurations:**

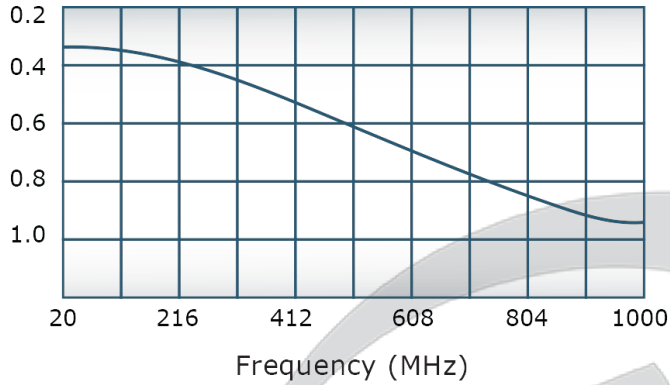
| <b>Model</b> | <b>Sum Port (J1)</b> | <b>Inputs/Outputs (J2,J3)</b> |
|--------------|----------------------|-------------------------------|
| H8151-102    | SMA                  | SMA                           |

**Werlatone's** standard line of High Power 180° RF Hybrid Combiners/Dividers covers multiple octaves within a microwave device. Low frequency 180° Hybrid Combiner/Dividers employ proprietary ferrite transmission line techniques, similar to our 0° Combiners/Dividers. Insertion loss in both sum and difference ports is minimal, allowing the hybrid to handle high power over its frequency range. Custom requirements are welcome.

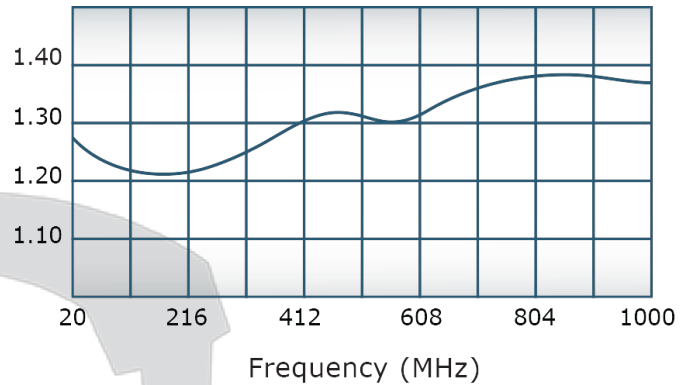


## Performance Data (Specifications subject to change without notice):

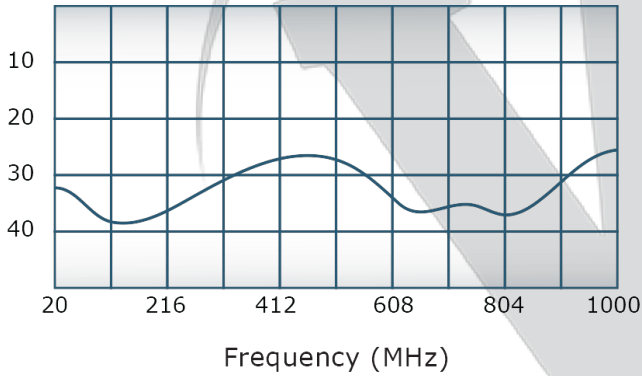
Insertion Loss:



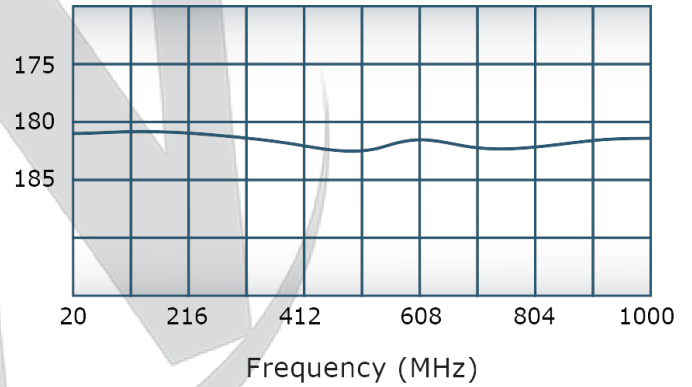
VSWR:



Isolation:



Phase Balance:

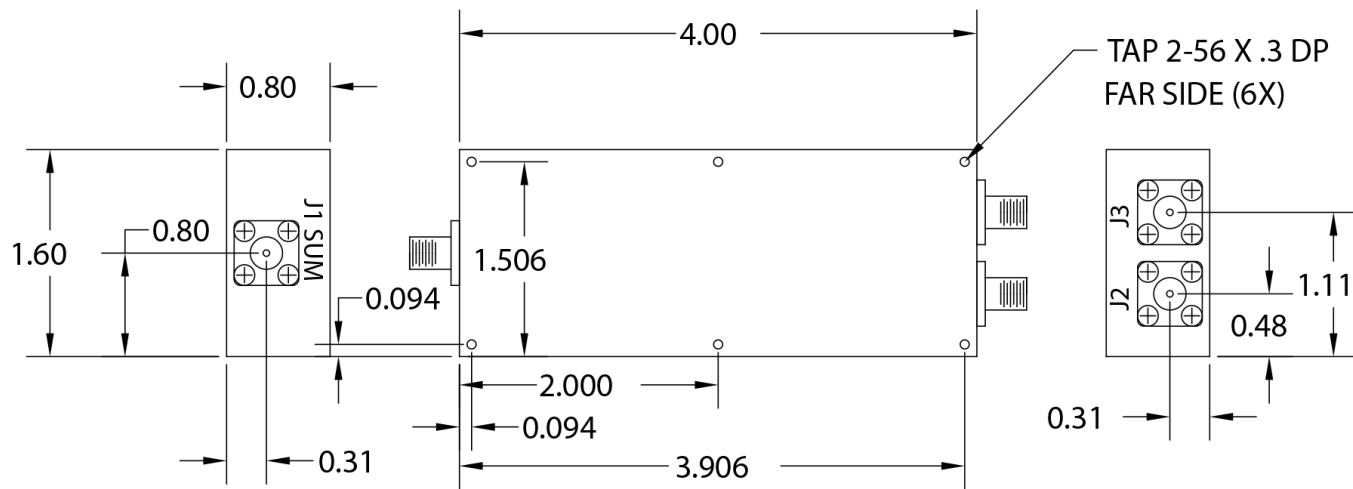


Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of

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<br>XXX +/- .005 | USED ON:             | SCALE                       | DRAWN BY: RH<br>APPVD BY: CS |
| X                           | TITLE <b>OUTLINE</b> |                             |                              |
|                             | DATE<br>3/5/04       | DRAWING NUMBER<br>10963-500 |                              |

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