



## PRODUCT DATA SHEET

H1846

**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:         | 88 - 108 MHz   |
| Power:             | 1200 W CW      |
| Insertion Loss     | 0.2 dB Max.    |
| VSWR:              | 1.30:1 Max.    |
| Phase Balance:     | 180° ± 3° Max. |
| Amplitude Balance: | ± 0.1 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 6.0 x 2.25"   |

### Connector Configurations:

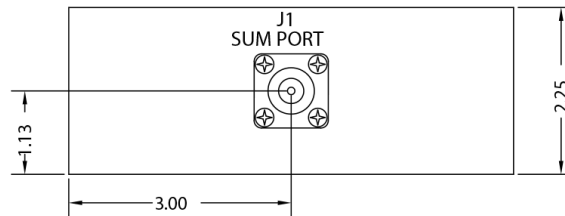
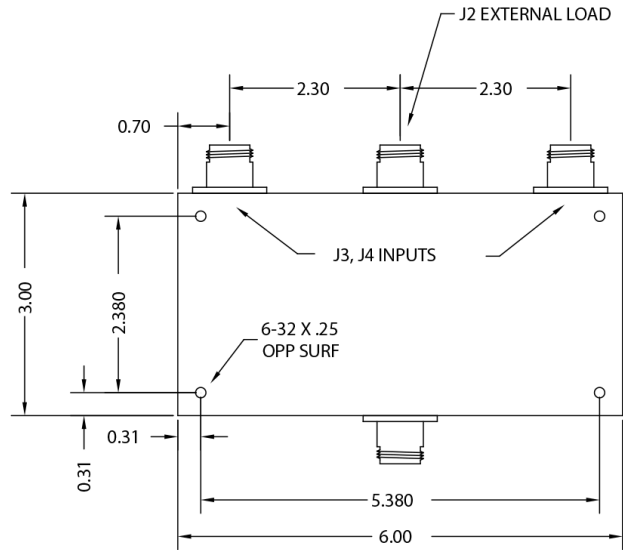
| Model    | Sum Port (J1) | Ext. Load Port (J2) | Inputs (J3,J4) |
|----------|---------------|---------------------|----------------|
| H1846-10 | N Female      | N Female            | N Female       |

**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.

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| DATE | SYM | REVISION RECORD | AUTH | DR | CK |
|------|-----|-----------------|------|----|----|
|      |     |                 |      |    |    |
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|                             |                             |         |                           |
|-----------------------------|-----------------------------|---------|---------------------------|
| TOLERANCE                   | WERLATONE INC.              |         |                           |
| XX +/- .015<br>XXX +/- .005 | USED ON:                    | SCALE   | DRAWN BY: MJ<br>APPVD BY: |
| TITLE                       |                             | OUTLINE |                           |
| DATE<br>4/5/02              | DRAWING NUMBER<br>10564-501 |         |                           |

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