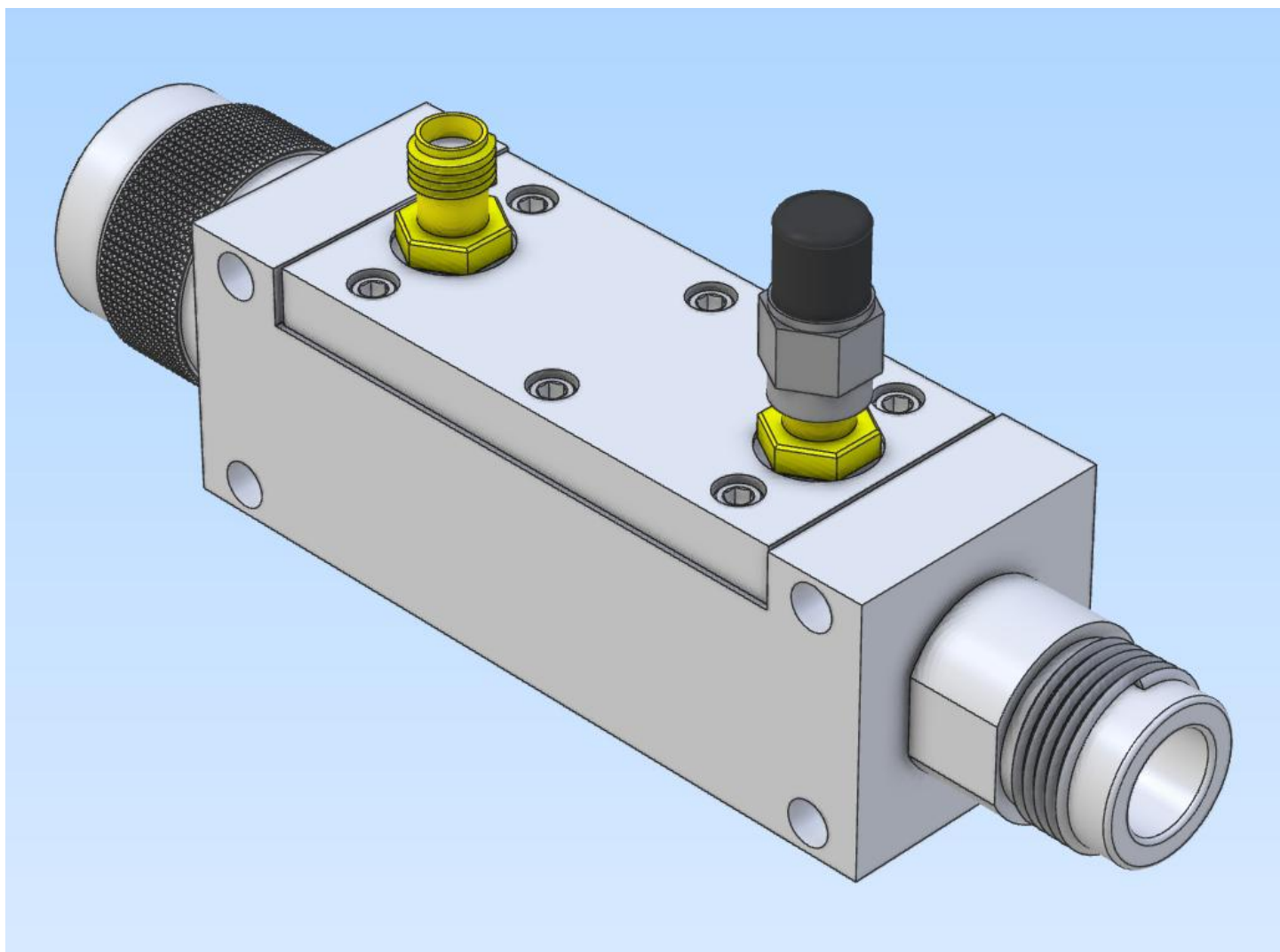


## High Power Coupler Datasheet

### **WMHPC30-2040-NMFS**

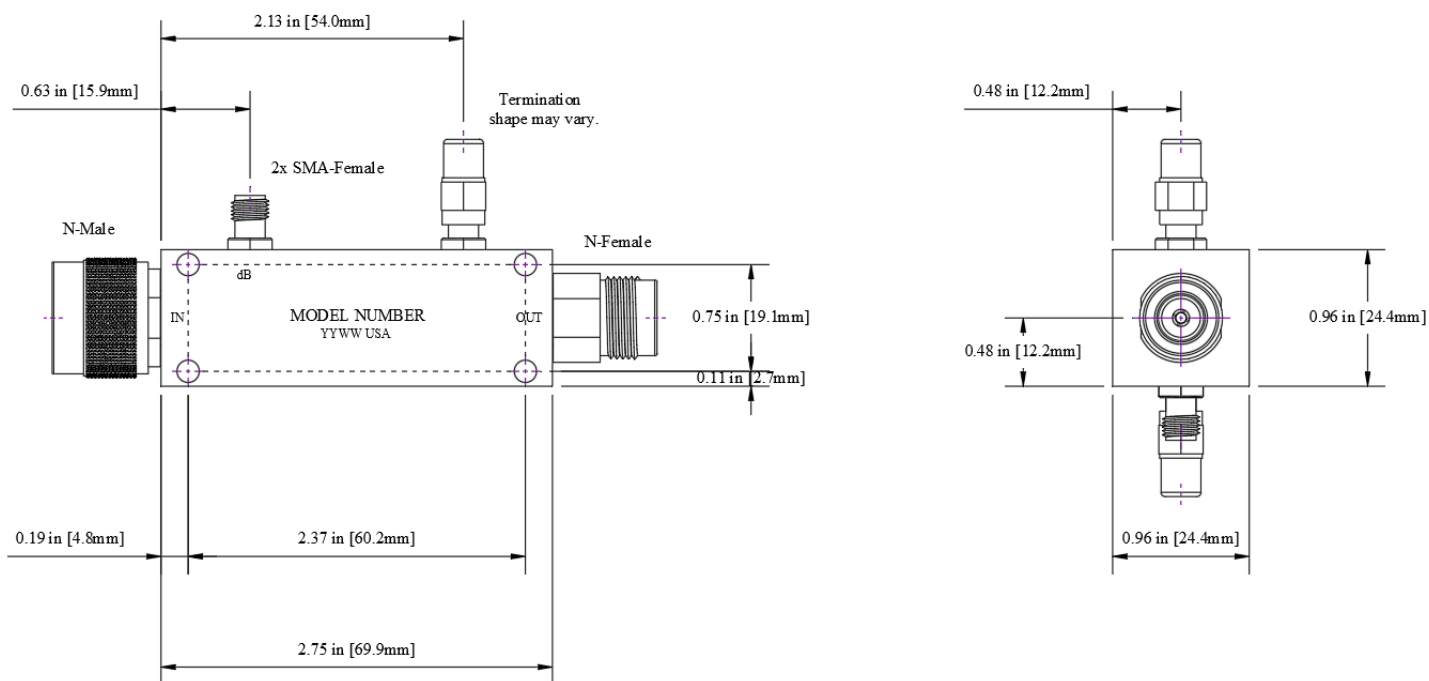
#### Features

- 400 watts average power handling.
- DC Passing from Input to Output.
- Air dielectric.
- Single coupled port.
- 1 year warranty.
- Made in USA.



Product in current development. 3D rendering is presented. Some features omitted for clarity.

## Outline Drawing

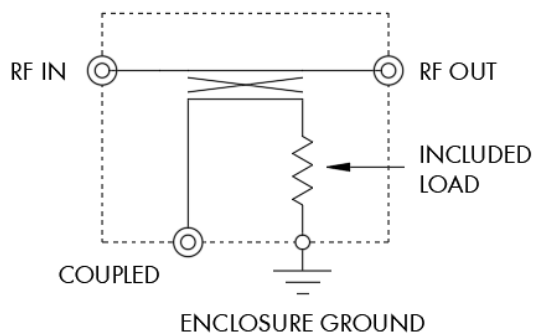


Outline drawing # OL-AIRCPL-2060-1 (Werbel reference).

Dimensions are in inches, [mm] shown for convenience.

Tolerances on 2-pl decimals:  $\pm 0.03$ . 3-pl decimals:  $\pm 0.015$ .

## Simplified Electrical Schematic



| Electrical Specifications (at +25 °C) | Min   | Typ. | Max   | Units |
|---------------------------------------|-------|------|-------|-------|
| Frequency Range                       | 2000  |      | 4000  | MHz   |
| Impedance                             |       | 50   |       | Ohm   |
| Coupling                              | 28.25 | 30   | 31.75 | dB    |
| Mainline Loss <sup>1</sup>            |       |      | 0.3   | dB    |
| Directivity                           | 20    |      |       | dB    |
| Mainline Return Loss (In and Out)     | 20    |      |       | dB    |
| Secondary Line Return Loss            | 20    |      |       | dB    |
| Isolation                             |       | 50   |       | dB    |
| Forward Power (Average) <sup>2</sup>  |       |      | 400   | W     |
| Reverse Power (Average) <sup>2</sup>  |       |      | 400   | W     |
| Termination Power                     |       |      | 1     | W     |
| DC Current (In to Out)                |       |      | 10    | A     |

| Mechanical                         | Specification                               |
|------------------------------------|---------------------------------------------|
| Environment                        | Indoor Use                                  |
| Humidity                           | 10 - 90% non-condensing                     |
| Operating Temperature <sup>3</sup> | -55 to +85 °C                               |
| Storage Temperature                | -55 to +100 °C                              |
| Finish                             | Clear Chemical Conversion Film (Conductive) |
| In/Out Connectors                  | N Male/Female, Stainless Steel              |
| Coupled Connector                  | SMA Female, Brass, Gold Plated              |
| Estimated Weight                   | 120 g (4.2 oz)                              |

| Regulatory                    | Specification            |
|-------------------------------|--------------------------|
| RoHS Compliant <sup>4</sup>   | Yes                      |
| REACH Compliance <sup>4</sup> | Unaffected               |
| ECCN                          | EAR99                    |
| HTSUS                         | 8525.50.3035             |
| Country of Origin             | United States of America |

1. Mainline loss includes coupling loss.
2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
3. Electrical specifications are at +25 °C.
4. To the best of our knowledge at time of publication.

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or documentation of the part, in order to implement improvements. Werbel Microwave LLC reserves the right to make such changes as required without notice. Unless otherwise stated, all specifications and dimensions are nominal. Werbel Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Werbel Microwave LLC does not assume any liability arising out of the use of any part of documentation. This document gives only a description of the product(s) and shall not form part of any contract. Please contact a Werbel Microwave LLC Applications Engineer for the most current specification drawing.