



## PRODUCT DATA SHEET

D7312

**Werlatone® Mismatch Tolerant®** High Power Broadband RF Combiners and Dividers will operate into High Load VSWR Conditions, for extended periods, without damage. With extensive experience as a supplier to military platforms worldwide **Werlatone®** designs its High Power Broadband Combiners, Power Dividers, and N-Way Combiners for proper operation in the most stringent operating conditions.

### Features:

High Power      Wide Bandwidths      Small Size      High Isolation      Custom Designs Available

### Electrical Specifications:

Frequency: 10 - 100 MHz  
Power: 100 W CW  
Insertion Loss: 0.35 dB Max.  
VSWR: 1.25:1 Max.  
Phase Balance:  $\pm 5^\circ$  Max.  
Amplitude Balance: 0.2 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: 0.5 lbs.  
Size: 3.0 x 3.0 x 0.8"

### Connector Configurations:

| Model     | Sum Port (J1) | Input/Output (J2-J5) |
|-----------|---------------|----------------------|
| D7312-102 | SMA           | SMA                  |

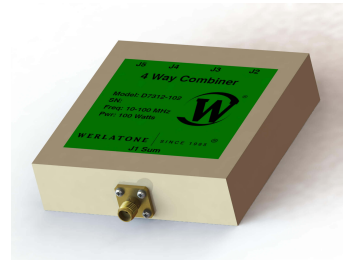
**When specified, Werlatone® High Power Combiners and RF Dividers** will tolerate full input failures on adjacent port(s). This insures that remaining transmitter(s) may continue to operate until the amplifier system can be properly shut down for maintenance. Choose your specific connector configuration from a list of options. Additional connector configurations for our High Power RF Combiners/Dividers, Non-Coherent Combiners, and N-Way Combiners are available upon request.



# WERLATONE

Model D7312

Combiners In-Phase Connectorized

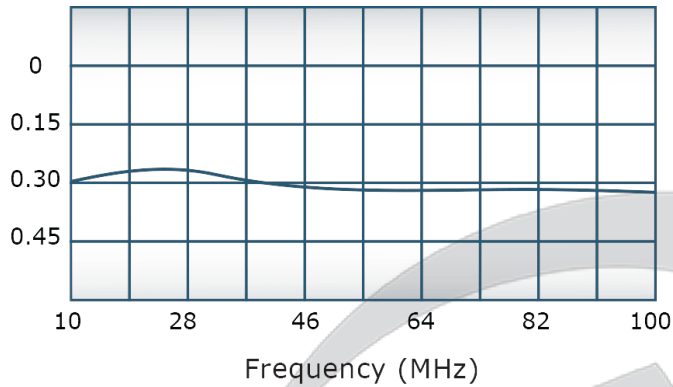


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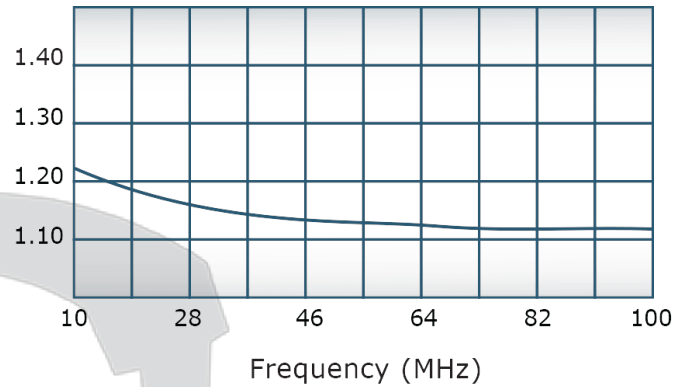
D7312

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

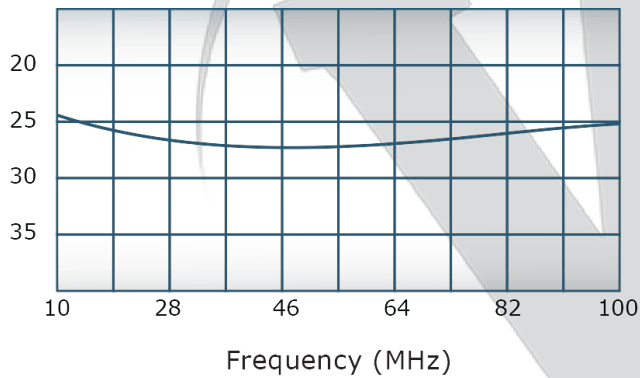
Insertion Loss:



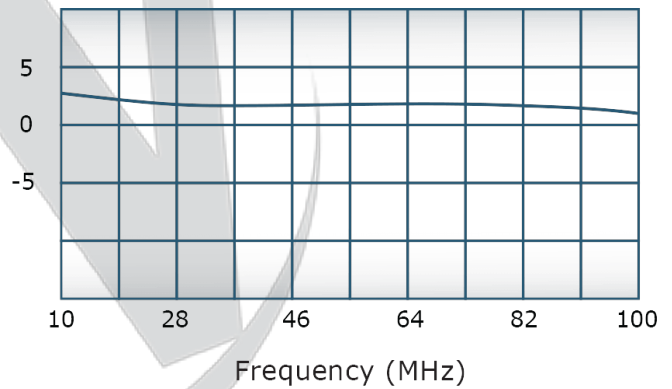
VSWR:



Isolation:



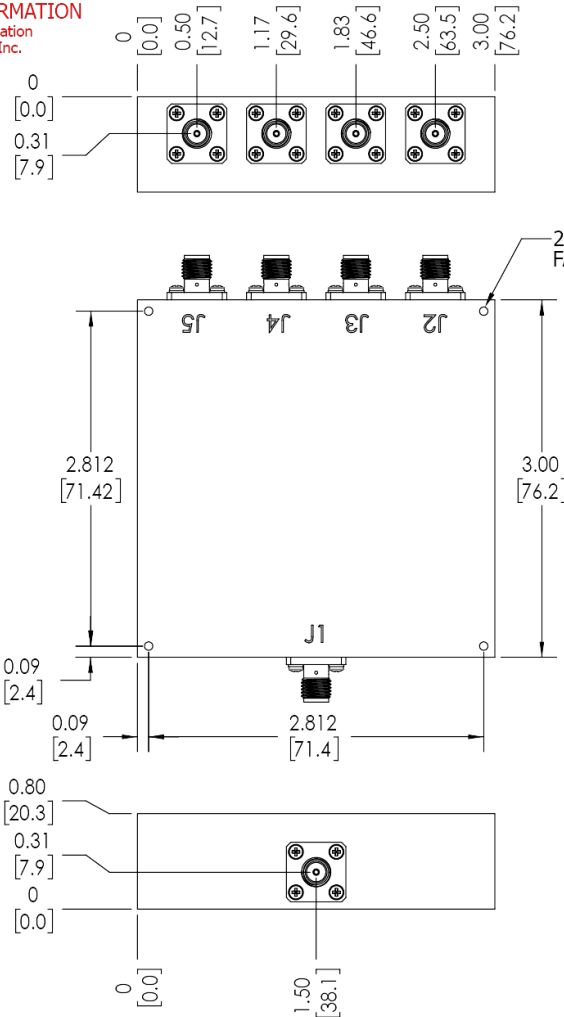
Phase Balance:



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| REVISION HISTORY |                 |           |          |
|------------------|-----------------|-----------|----------|
| REV.             | REVISION RECORD | DATE      | APPROVED |
| A                | ECN 8542        | 1/09/14   | SC       |
| B                | ECN 9696        | 9/10/2019 | RB       |

**NOTES: UNLESS OTHERWISE SPECIFIED**

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS: J1-J5: SMA FEMALE**

|             |         |  |  |      |           |   |  |           |              |
|-------------|---------|--|--|------|-----------|---|--|-----------|--------------|
|             |         | UNLESS OTHERWISE SPECIFIED   |  | OWN  | DATE      |  WERLATONE  SINCE 1965 | 17 Jon Barrett Rd<br>Patterson, NY 12563 |           |              |
|             |         | INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100   |  | SD   | 9/10/2019 |   |  |           |              |
|             |         | DIMENSIONS PER ASME Y14.5M-2009  |  | CHK  | DATE      |   |  |           |              |
|             |         | PARENTHESES FOR REF ONLY   |  | CS   | 9/10/2019 |   | TITLE                                    |           |              |
|             |         | DIMENSIONS ARE IN INCHES   |  | ENGR | DATE      |   |  |           |              |
|             |         | DIMENSIONAL LIMITS APPLY BEFORE FINISHES   |  | INPR | DATE      |   |  |           |              |
|             |         | TOLERANCES:  |  | QA   | DATE      |   |  |           |              |
|             |         | ANGLES ± 2°  |  |      |           |   |  |           |              |
|             |         | 3 PL ± .005 [13]   |  |      |           |   |  |           |              |
|             |         | 2 PL ± .015 [38]   |  |      |           |   |  |           |              |
|             |         | REMOVE ALL BURRS AND SHARP EDGES R.01 MAX  |  |      |           |   |  |           |              |
|             |         | CONCENTRICITY MACHINED DIA. .002 FIM   |  |      |           |   |  |           |              |
|             |         | MACHINE TOOL MISMATCH .003 FIM   |  |      |           |   |  |           |              |
| NEXT ASSY   | USED ON |  |  | RLSE | DATE      | SIZE  | CAGE CODE                                | DWG NO.   | REV          |
| APPLICATION |         | THIRD ANGLE PROJECTION  |  |      |           | B   |  | 10664-500 | B            |
|             |         |  |  |      |           | SCALE   | 1:1                                      |           | SHEET 1 OF 1 |

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