

PRODUCT DATA SHEET

C11742

4-Port Dual Directional Coupler employs two, 3-Port Uni-Directional Couplers, internally connected, in tandem, providing measurement of both forward and reverse power. Ideal for simultaneously monitoring a system's forward and reverse power and for reflectometer measurements. Unlike the Bi-Directional Coupler, the directivity of the Dual Directional Coupler is unaffected by the loads on the coupled ports.

Features:

High Power Wide Bandwidths Small Size Flat Coupling Custom Designs Available

Electrical Specifications:

| | |
|-----------------|---|
| Frequency: | 20 - 2500 MHz |
| Power: | 200 W CW (20-500 MHz), 150 W CW (500-1000 MHz), 50 W CW (1000-2600 MHz) |
| Coupling: | 40 ± 1.0 dB Max. |
| Insertion Loss: | 0.5 dB Max. |
| Flatness: | ± 1.0 dB Max. |
| VSWR (ML): | 1.30:1 Max. |
| Directivity: | 18 dB Min. |

Mechanical Specifications:

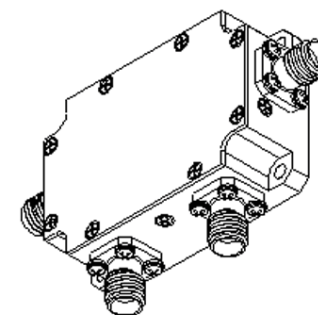
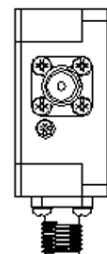
| | |
|------------------------|---|
| Type: | Connectorized |
| Material: | Aluminum 6061-T6 |
| Surface Finish: | Chem. Film Per MIL-DTL-5541F Type II Class 3 (Clear Iridite) RoHS Compliant Available |
| Operating Temperature: | -55°C to +75°C |
| Storage Temperature: | -60°C to +85°C |
| Humidity: | 95% Non-Condensing |
| Size: | 1.76 x 1.16 x 0.565" |

Connector Configurations:

| Model | Input (J1) | Output (J2) | Fwd (J3) | Rev (J4) |
|------------|------------|-------------|----------|----------|
| C11742-102 | SMA | SMA | SMA | SMA |

Werlatone® Broadband Dual, Uni, and Bi Directional RF Couplers are designed to tolerate the most stringent operating conditions associated with military and EMC testing environments. Many of our RF Directional Couplers, designated Mismatch Tolerant®, will operate continuously, at rated power, into a severe load mismatch condition. Our multi-octave Directional Couplers maintain exceptional coupling flatness, directivity, VSWR, and insertion loss.

A technical drawing of a rectangular metal component, likely a part of a mechanical assembly. It features a central rectangular body with two threaded sections at each end. The left end shows a series of vertical lines representing threads, and the right end also shows a similar threaded section. The component is shown in a perspective view, highlighting its three-dimensional structure.

B1

2