
**PRODUCT DATA SHEET**
**C6177**

**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:      0.01 - 250 MHz  
 Power:          1000 W CW  
 Coupling:        40 ± 1.0 dB Max.  
 Insertion Loss: 0.4 dB Max.  
 Flatness:        ± 0.75 dB Max.  
 VSWR (ML):    1.25:1 Max.  
 Directivity:     20 dB Min.

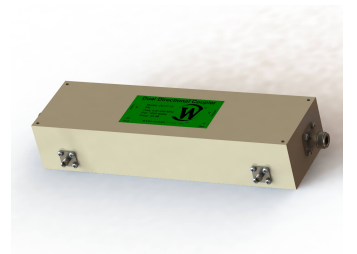
**Mechanical Specifications:**

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  
 Humidity:        95% Non-Condensing  
 Size:              10.5 x 3.0 x 2.0"

**Connector Configurations:**

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C6177-10	N Female	N Female	N Female	N Female
C6177-12	N Female	N Female	SMA	SMA
C6177-13	N Female	N Female	BNC	BNC
C6177-20	7/16 Female	7/16 Female	N Female	SMA
C6177-712	N Male	N Female	SMA	SMA
C6177-714	N Male	N Female	N Female	N Female

**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.

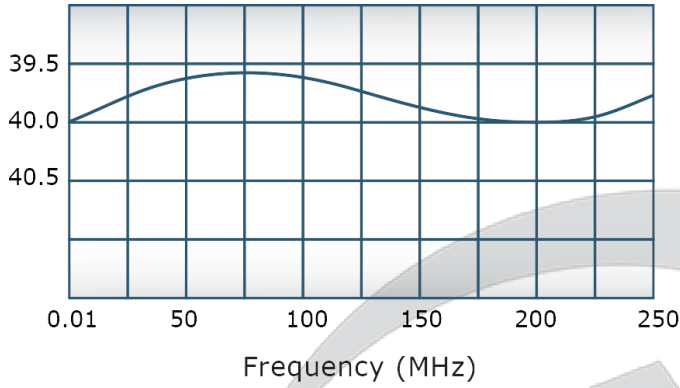


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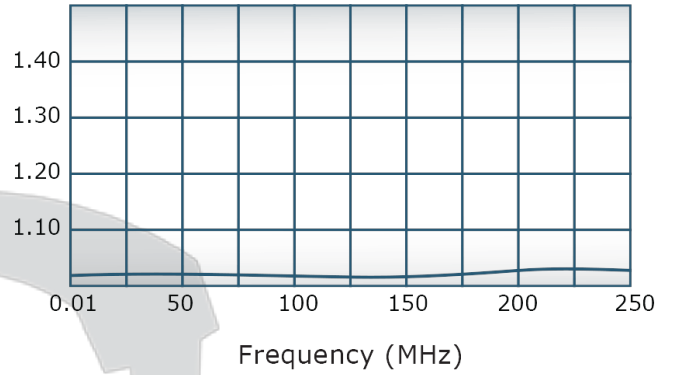
C6177

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

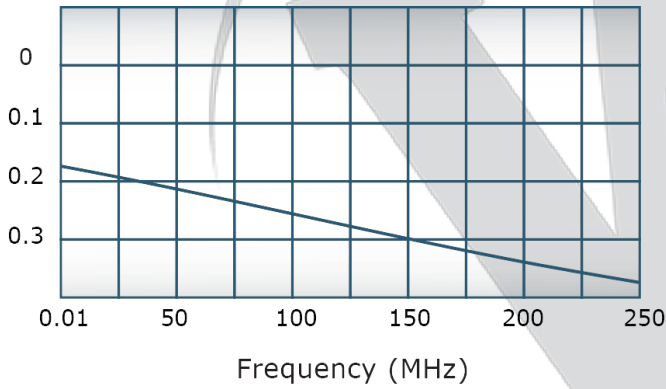
Coupling:



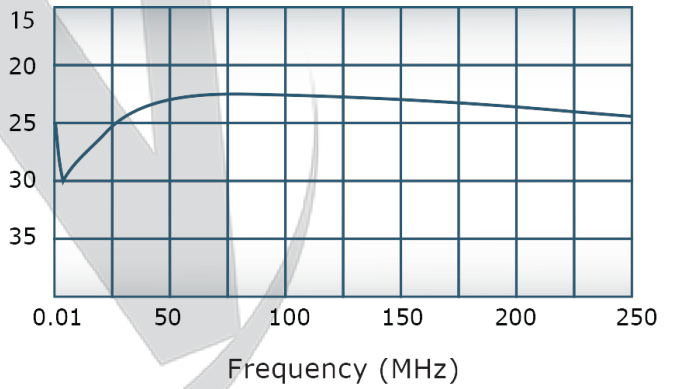
VSWR:



Insertion Loss:



Directivity:



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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

