
**PRODUCT DATA SHEET**
**C10117**

**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: 700 - 6000 MHz  
 Power: 250 W CW  
 Coupling:  $40 \pm 1.0$  dB Max.  
 Insertion Loss: 0.2 dB Max.  
 Flatness:  $\pm 1.0$  dB Max.  
 VSWR (ML): 1.30:1 Max.  
 VSWR (CP): 2.0:1 Max.  
 Directivity: 15 dB Min. (20 dB Typical)

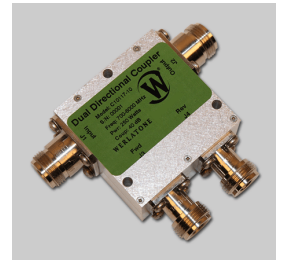
**Mechanical Specifications:**

Type: Connectorized  
 Material: Aluminum 6061-T6  
 Surface Finish: Chem. Film Per MIL-DTL-5541F  
 Type II Class 3 (Clear Iridite)  
 Operating Temperature: -55°C to +75°C  
 Storage Temperature: -60°C to +85°C  
 Humidity: 95% Non-Condensing  
 Size: 2.0 x 2.0 x 1.06"

**Connector Configurations:**

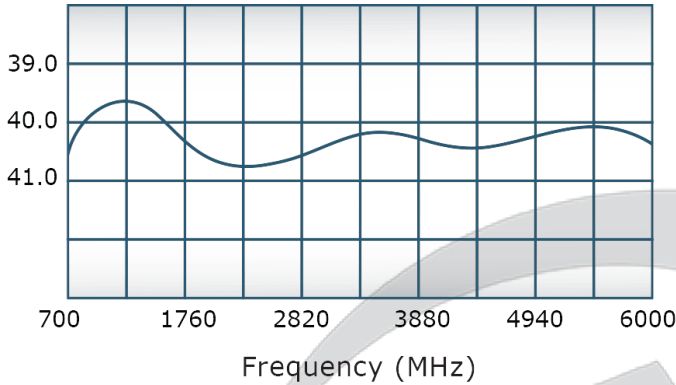
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10117-10	N Female	N Female	N Female	N Female
C10117-12	N Female	N Female	SMA	SMA
C10117-14	N Female	N Female	BNC	BNC
C10117-610	N Female	N Male	N Female	N Female
C10117-612	N Female	N Male	SMA	SMA
C10117-714	N Male	N Female	N Female	N Female

**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.

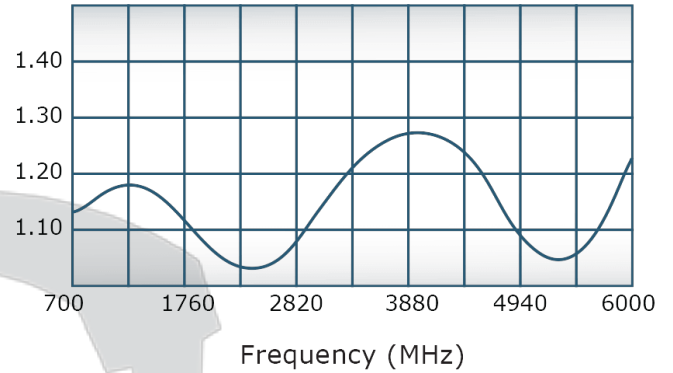


## Performance Data (Specifications subject to change without notice):

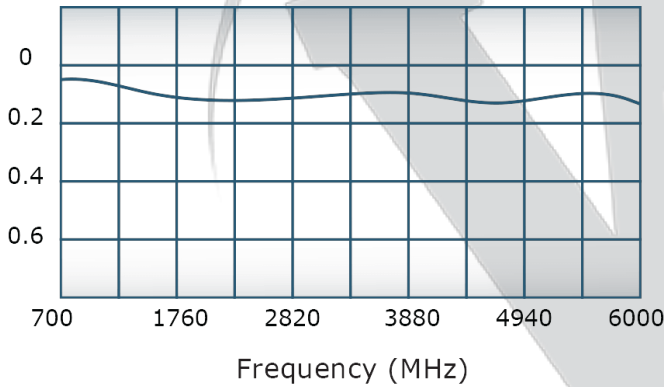
Coupling:



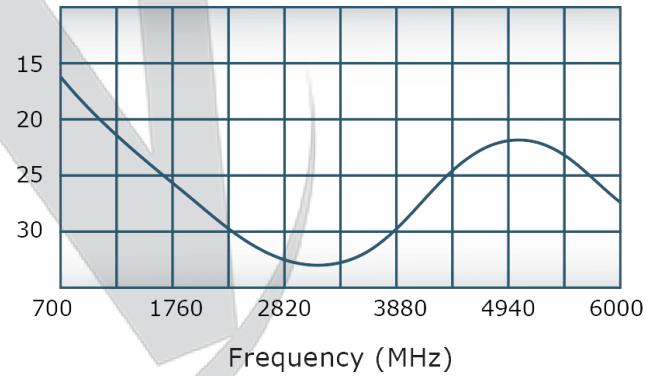
VSWR:



Insertion Loss:



Directivity:



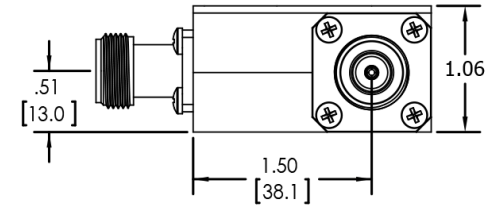
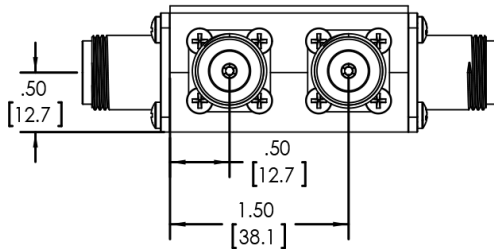
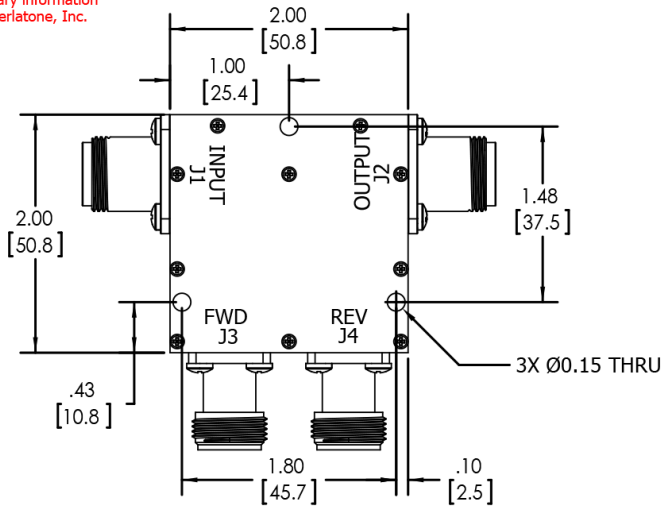
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Werlatone, Inc.

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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
	PRE-RELEASE		



UNLESS OTHERWISE SPECIFIED		DATE	DATE	DATE	DATE
OWN	SC	9/30/2014	9/30/2014	9/30/2014	9/30/2014
CHK	CS	9/30/2014	9/30/2014	9/30/2014	9/30/2014
ENGR	DWG	9/30/2014	9/30/2014	9/30/2014	9/30/2014
MPGR	DATE	9/30/2014	9/30/2014	9/30/2014	9/30/2014
QA	DATE	9/30/2014	9/30/2014	9/30/2014	9/30/2014
RELE	DATE	9/30/2014	9/30/2014	9/30/2014	9/30/2014
APPLICATION		THIRD ANGLE PROJECTION	SCALE	1:1	SHEET 1 OF 1

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