

PRODUCT DATA SHEET

C10511

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 - 400 MHz
Power: 30 W CW
Coupling: 30 ± 1.0 dB Max.
Insertion Loss: 0.75 dB Max.
Flatness: ± 0.5 dB Max.
VSWR (ML): 1.30:1 Max.
Directivity: 20 dB Min.

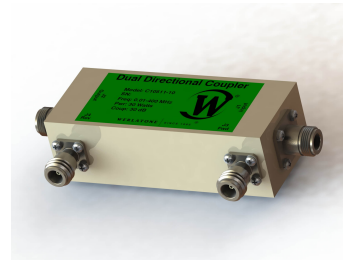
Mechanical Specifications:

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: 5.0 x 2.0 x 1.51"

Connector Configurations:

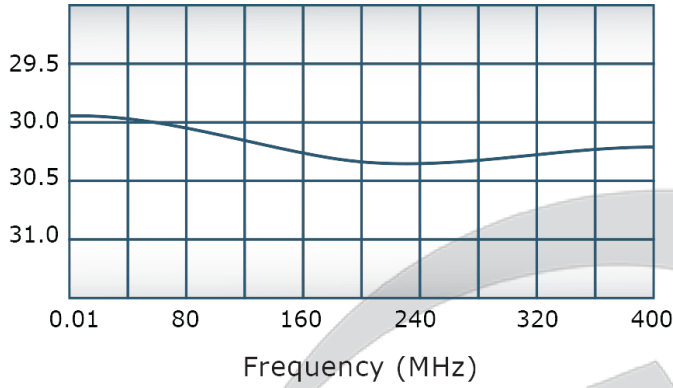
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10511-10	N Female	N Female	N Female	N Female
C10511-12	N Female	N Female	SMA	SMA
C10511-13	N Female	N Female	BNC	BNC
C10511-102	SMA	SMA	SMA	SMA

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.

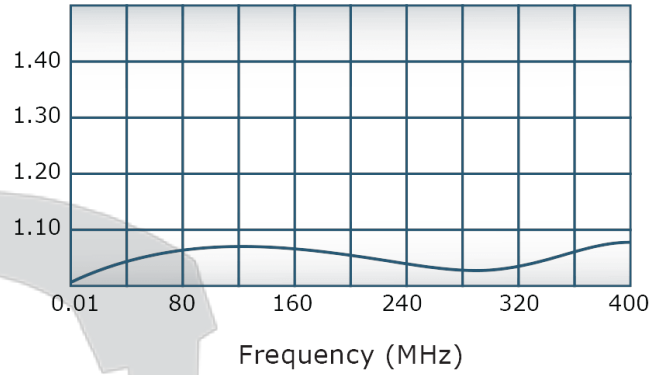


Performance Data (Specifications subject to change without notice):

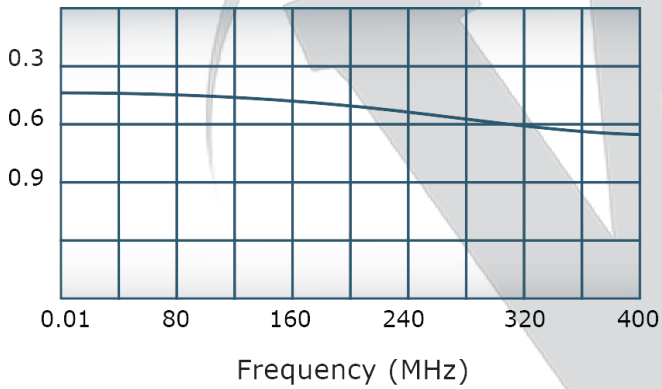
Coupling:



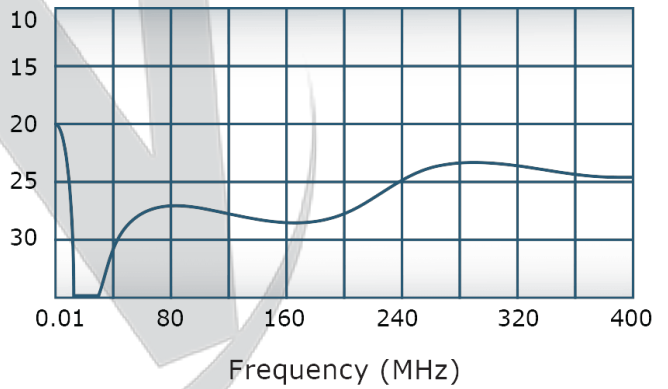
VSWR:



Insertion Loss:



Directivity:



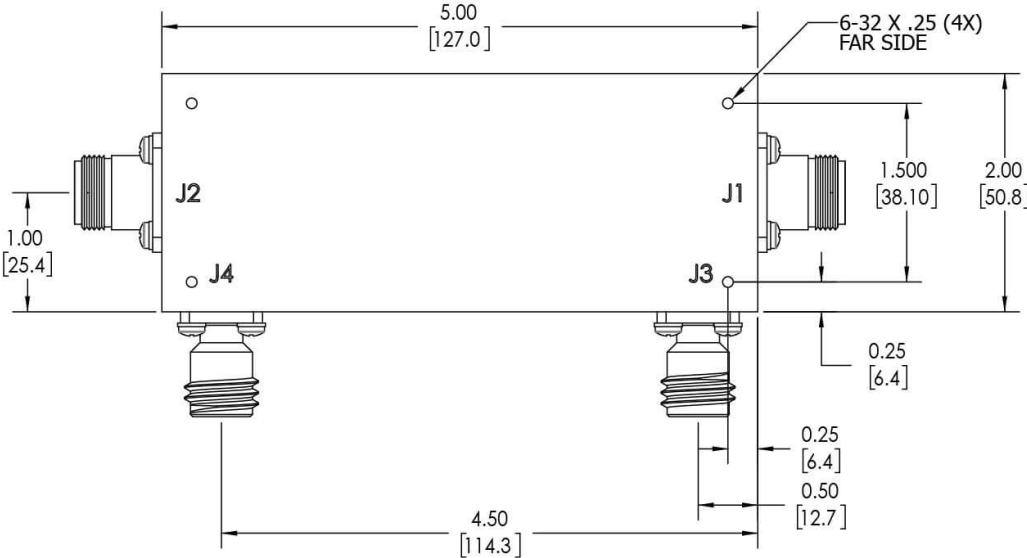
RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION
 This document contains proprietary information which is the sole property of Werlatone, Inc.

REVISION HISTORY

REV.	REVISION RECORD	DATE	APPROVED
C	ECN 3567	10/5/2004	JE
D	ECN 4139	1/15/2007	JE
E	ECN 9696	5/15/2019	RB

NOTES: UNLESS OTHERWISE SPECIFIED

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS:
 J1-J4: N FEMALE
 J1-INPUT; J2-OUTPUT
 J3-FWD; J4-REV**



UNLESS OTHERWISE SPECIFIED		DWN	DATE	17 Jon Barrett Rd Patterson, NY 12563	
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-199	SD	5/14/2019		W WERLATONE SINCE 1965	
DIMENSIONS FOR ASSEMBLY PER MIL-STD-2009	CHK	5/14/2019			
PARENTHESES INFO FOR REF ONLY	CS	5/14/2019		TITLE OUTLINE	
DIMENSIONS ARE IN INCHES	ENGR				
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	DATE			SIZE CAGE CODE DWG NO B 20676-500	
TOLERANCES:	INFR				
ANGLES ± 2°	QA			REV E	
3 PL ± .005 [13]	DATE				
2 PL ± .015 [38]				SCALE 1:1	
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX	RELSE				
CONCENTRICITY MACHINED DIA: .002 FIM				SHEET 1 OF 1	
MACHINE TOOL MISMATCH .003 MAX.					

NEXT ASSY	USED ON

THIRD ANGLE PROJECTION