
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 ± 1.0 dB Max.
 Insertion Loss: 0.2 dB Max.
 Flatness: ± 1.0 dB Max.
 VSWR (ML): 1.30:1 Max.
 VSWR (CP): 2.0:1 Max.
 Directivity: 15 dB Min. (20 dB Typical)

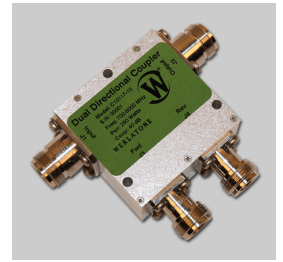
Mechanical Specifications:

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:

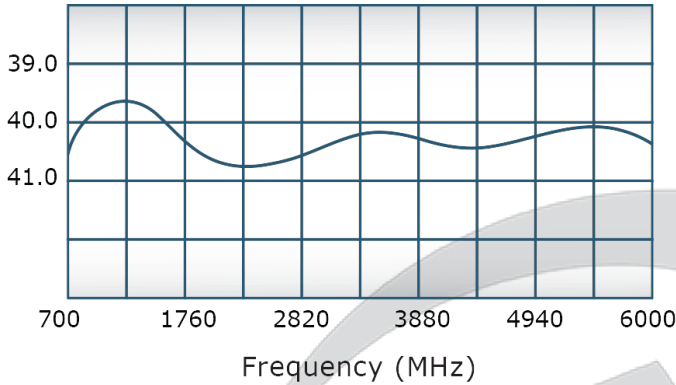
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10117-10	N Female	N Female	N Female	N Female
C10117-12	N Female	N Female	SMA	SMA
C10117-14	N Female	N Female	BNC	BNC
C10117-610	N Female	N Male	N Female	N Female
C10117-612	N Female	N Male	SMA	SMA
C10117-714	N Male	N Female	N Female	N Female

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.

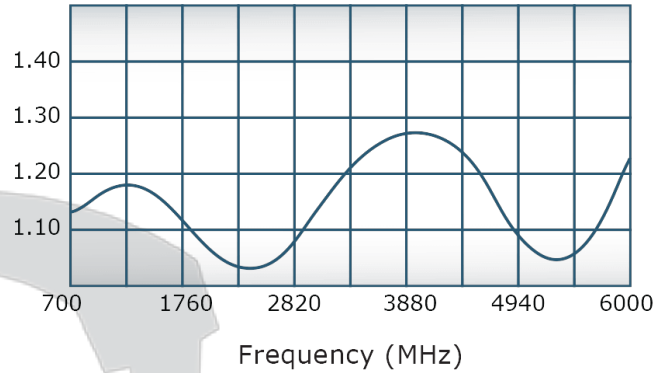


Performance Data (Specifications subject to change without notice):

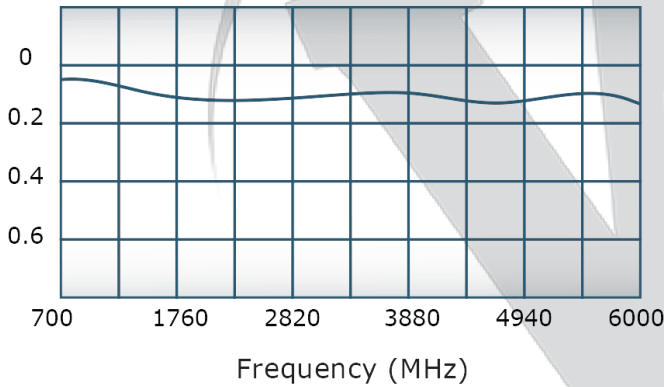
Coupling:



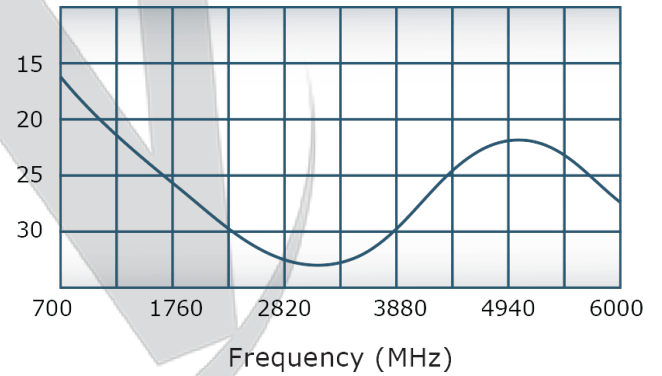
VSWR:



Insertion Loss:



Directivity:



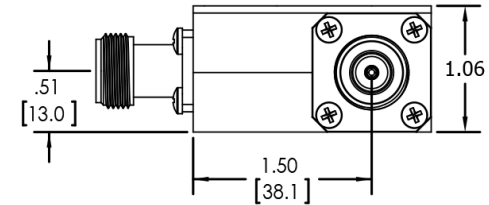
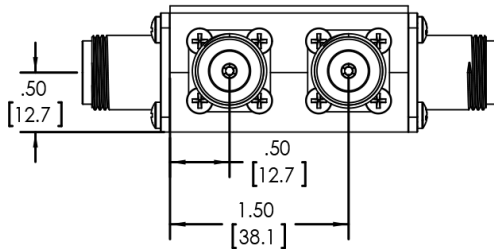
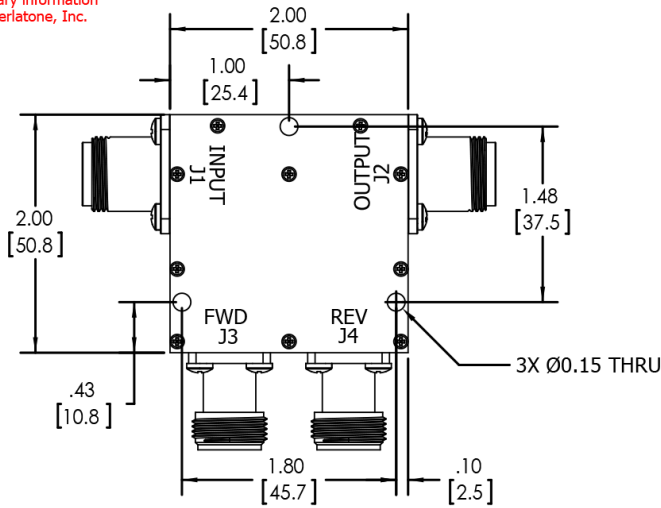
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Werlatone, Inc.

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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
	PRE-RELEASE		



UNLESS OTHERWISE SPECIFIED		DATE	9/30/2014	17 Jon Barrett Rd Patterson, NY 12563
INT	INTERPRET DRAWING IAW MIL-STD-100	SC	9/30/2014	WERLATONE SINCE 1965
CS	DIMENSIONING PER ASME Y14.5M 2009	CHK	9/30/2014	
CS	PARENTHEetical INFO FOR REF ONLY	CS	9/30/2014	TITLE
CS	DIMENSIONS ARE IN INCHES (mm)	DATE		OUTLINE
CS	DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	DATE		SIZE CAGE CODE DWG NO
CS	TOLERANCES:	DATE		B 28812 21250-500
CS	ANGLES ± 2°	DATE		REV
CS	3 PL ± .005 (L3)	DATE		-
CS	2 PL ± .015 (L4)	DATE		SCALE
CS	REMOVE ALL BURRS AND SHARP EDGES R.01 MAX	DATE		1:1
CS	CONCENTRICITY MACHINED DIA. .002 FIM	DATE		SHEET 1 OF 1
CS	MACHINE TOOL HIGHMATCH .003 MAX	DATE		

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