
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)

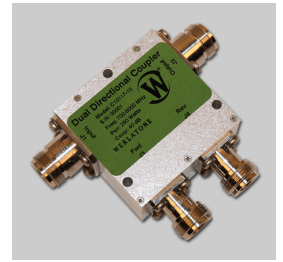
Mechanical Specifications:

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:

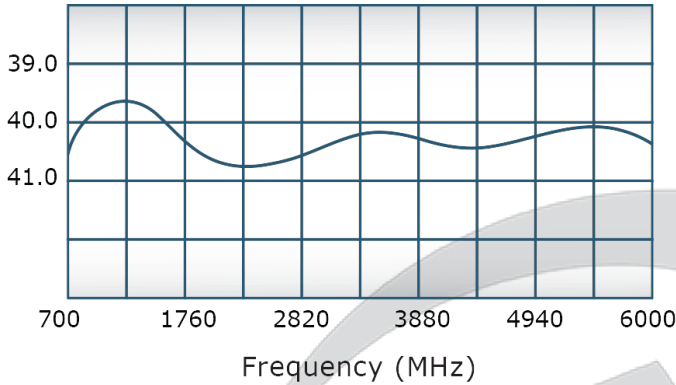
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10117-10	N Female	N Female	N Female	N Female
C10117-12	N Female	N Female	SMA	SMA
C10117-14	N Female	N Female	BNC	BNC
C10117-610	N Female	N Male	N Female	N Female
C10117-612	N Female	N Male	SMA	SMA
C10117-714	N Male	N Female	N Female	N Female

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.

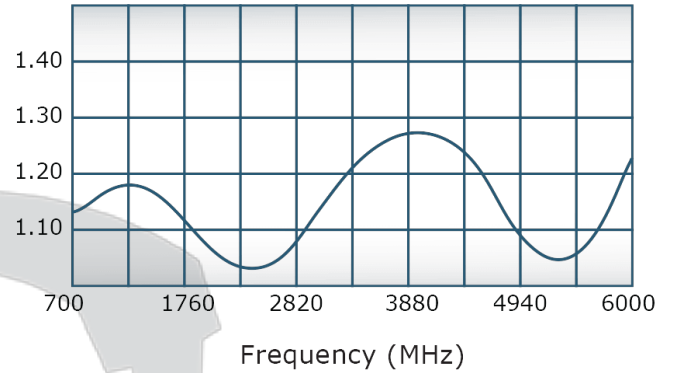


Performance Data (Specifications subject to change without notice):

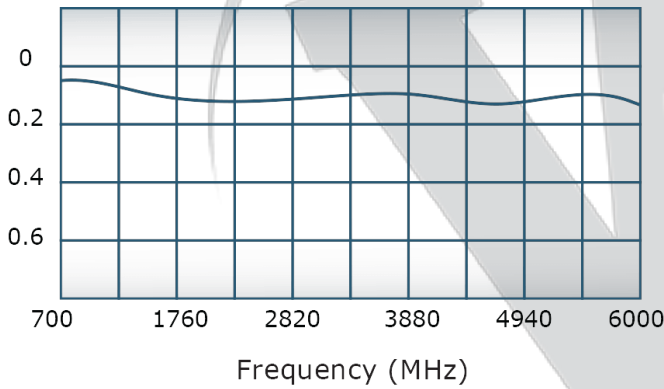
Coupling:



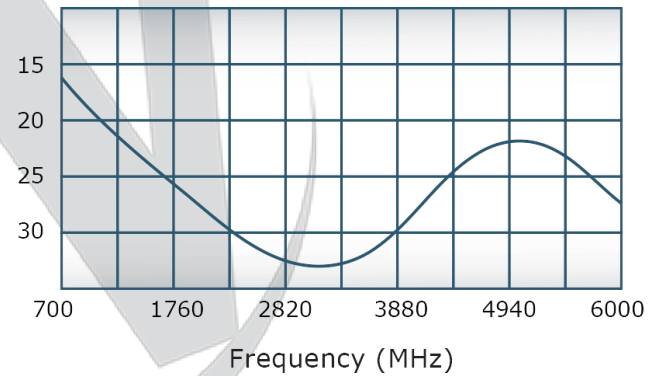
VSWR:



Insertion Loss:

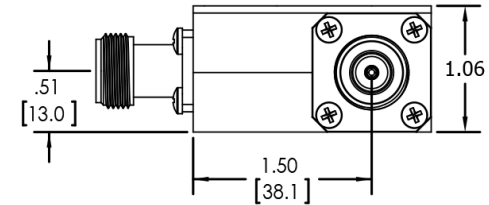
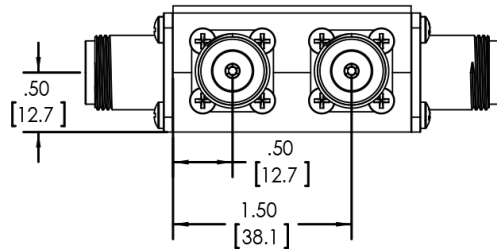
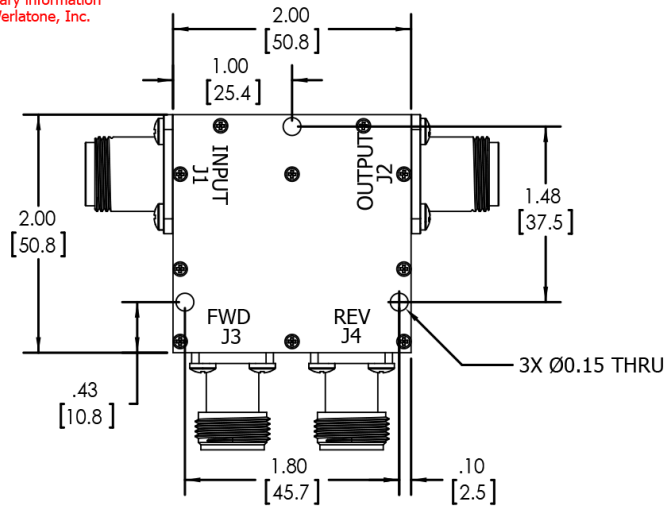


Directivity:



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
	PRE-RELEASE		



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

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