
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.

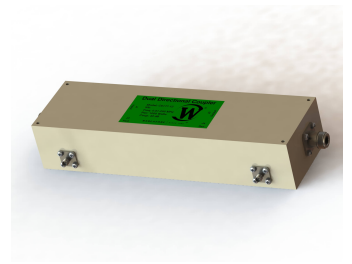
Mechanical Specifications:

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.

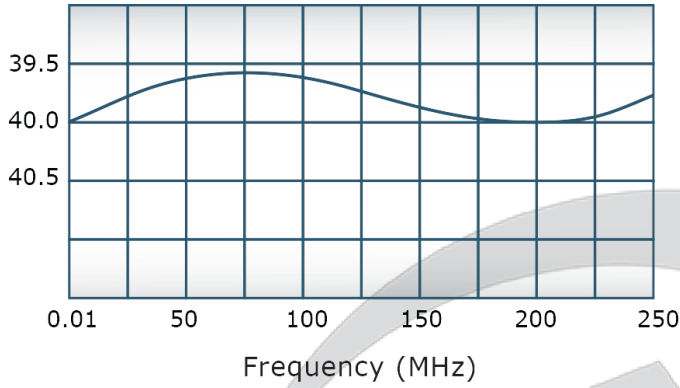


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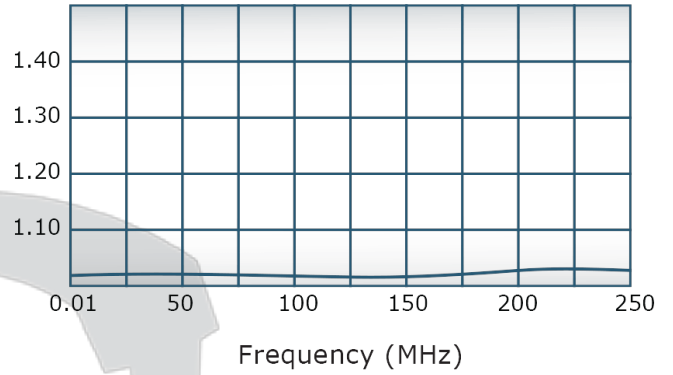
C6177

Performance Data (Specifications subject to change without notice):

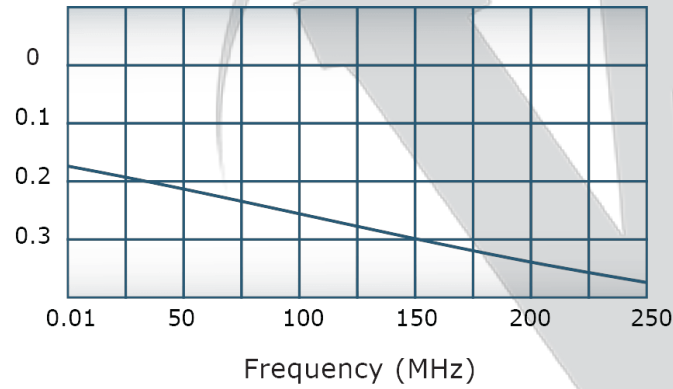
Coupling:



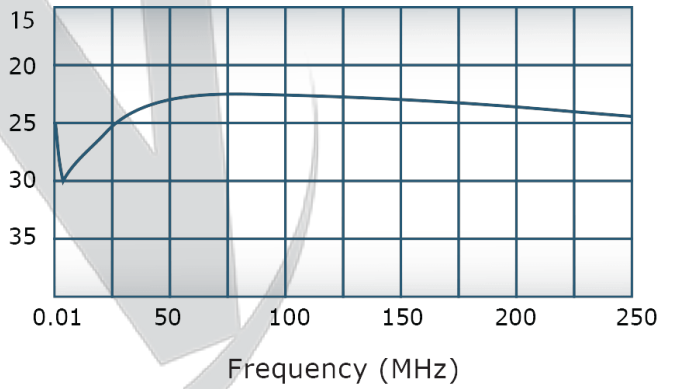
VSWR:



Insertion Loss:



Directivity:



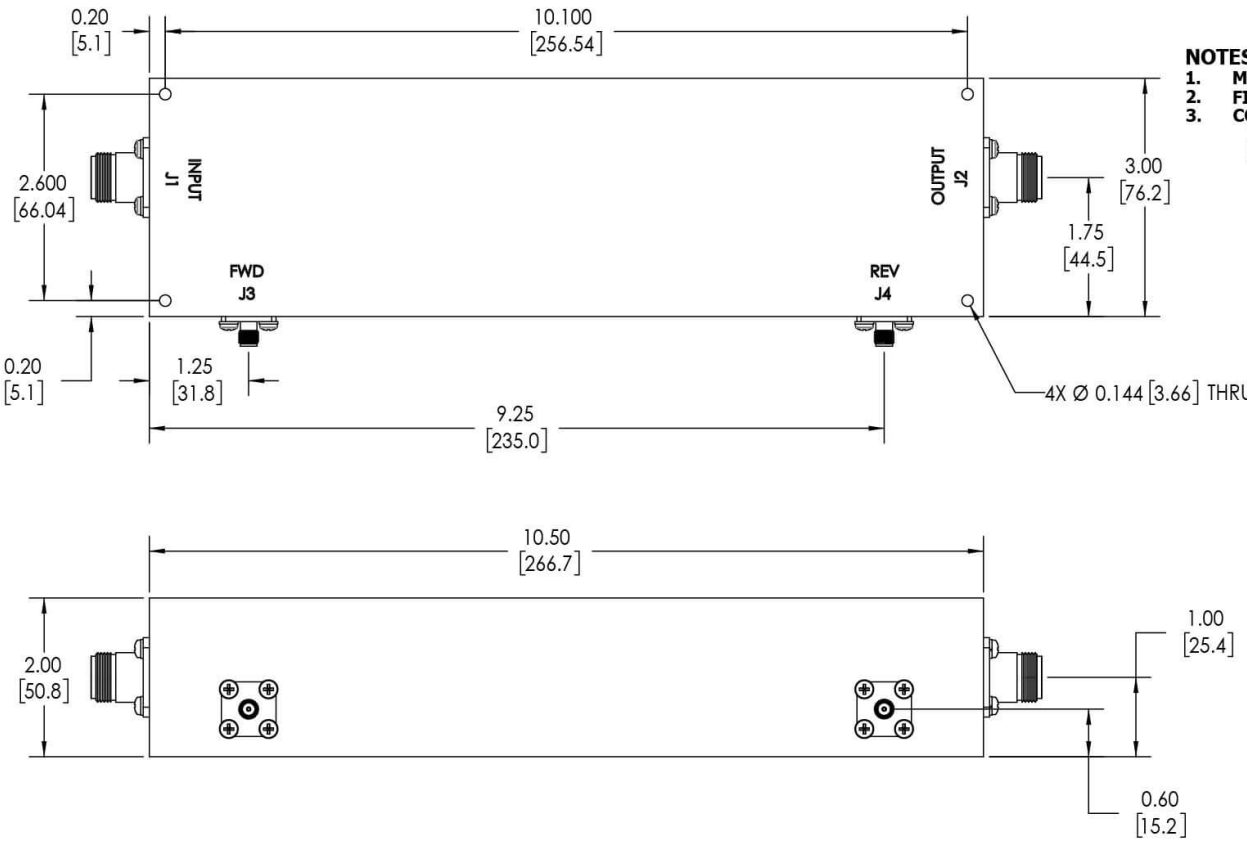
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Werlatone, Inc.

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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	5/13/2019	RB



NOTES: UNLESS OTHERWISE SPECIFIED

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDIOTE)**
- CONNECTORS:
 J1-J2: N FEMALE
 J3-J4: SMA FEMALE**

UNLESS OTHERWISE SPECIFIED		DWN	DATE	WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	5/13/2019		
DIMENSIONS FOR ASME Y14.5M-2009		CHK	DATE	TITLE	
PARENTHEetical INFO FOR REF ONLY		CS	5/13/2019		
DIMENSIONS ARE IN INCHES		ENGR	DATE	OUTLINE	
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE		
TOLERANCES:		QA	DATE	SIZE	CAGE CODE
ANGLES ± 2°		RLSE	DATE	B	10449-501
3 PL ± .005 [1.3]				DWG NO	REV
2 PL ± .015 [3.8]					A
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX				SCALE	
CONCENTRICITY MACHINED DIA: .002 FIM				1:1.5	
MACHINE TOOL MISMATCH .003 MAX.					SHEET 1 OF 1

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