
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:

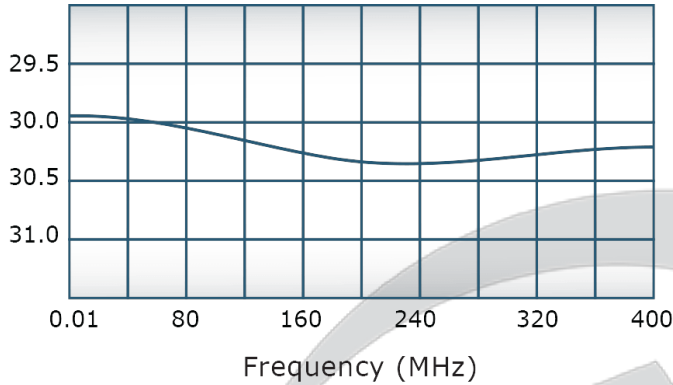
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10511-10	N Female	N Female	N Female	N Female
C10511-12	N Female	N Female	SMA	SMA
C10511-13	N Female	N Female	BNC	BNC
C10511-102	SMA	SMA	SMA	SMA

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.

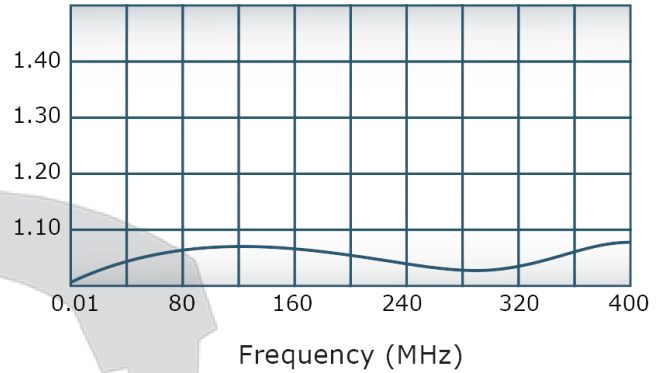


Performance Data (Specifications subject to change without notice):

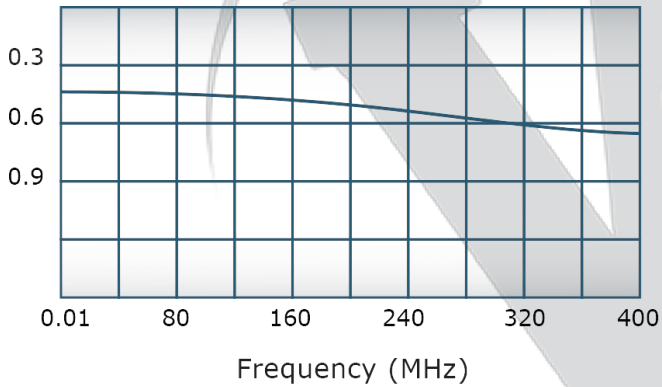
Coupling:



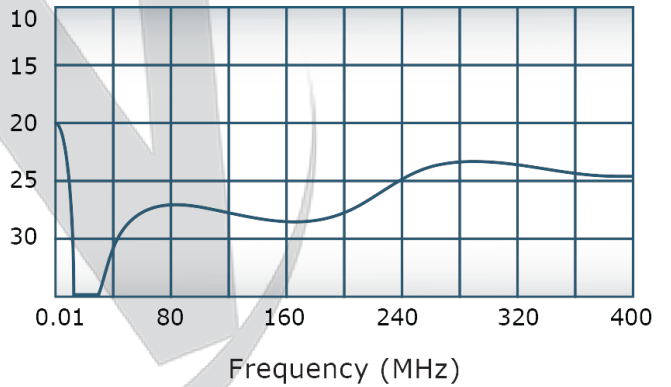
VSWR:



Insertion Loss:



Directivity:



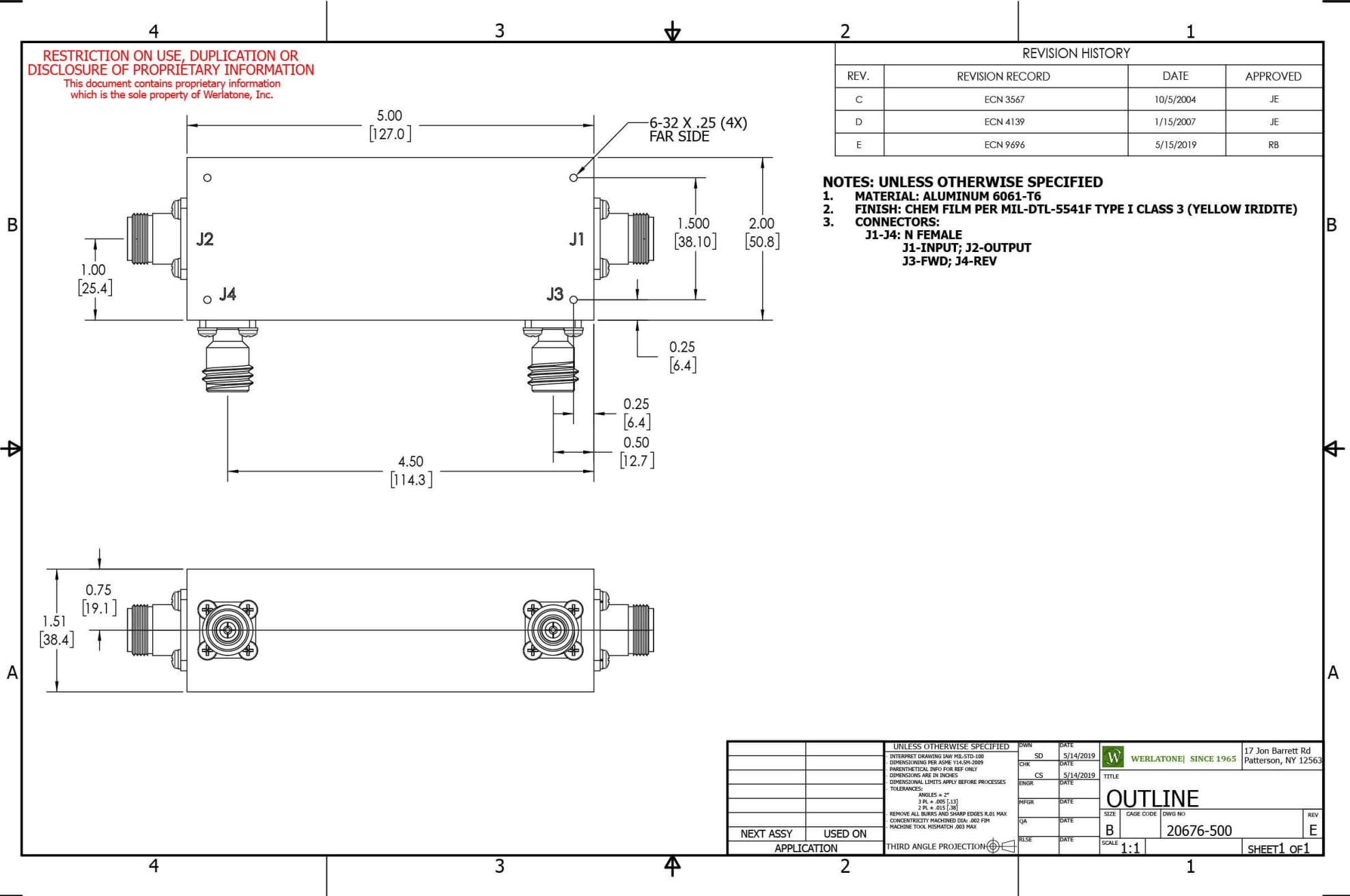
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
C	ECN 3567	10/5/2004	JE
D	ECN 4139	1/15/2007	JE
E	ECN 9696	5/15/2019	RB

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	5/14/2019	WERLATONE SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563			
INTERPRET DRAWING IAW MIL-STD-100		SD	DATE	5/14/2019				
DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE	5/14/2019	OUTLINE TITLE			
PARENTHEetical INFO FOR REF ONLY		CS	DATE	5/14/2019				
DIMENSIONS ARE IN INCHES		ENGR	DATE		SIZE	CAGE CODE	DWG NO	REV
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE		B		20676-500	E
TOLERANCES:		QA	DATE		SCALE	1:1		SHEET 1 OF 1
ANGLES = 2°		RLSE	DATE					
3 PL ± .005 [13]								
2 PL ± .015 [38]								
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX								
CONCENTRICITY MACHINED DIA: .002 FIM								
MACHINE TOOL MISMATCH .003 MAX								
NEXT ASSY	USED ON	THIRD ANGLE PROJECTION						
APPLICATION								

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 Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com