

**CMPD7000**

**SURFACE MOUNT  
DUAL, IN SERIES  
SILICON SWITCHING DIODES**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPD7000 type is a ultra-high speed silicon switching diode manufactured by the epitaxial planar process, in an epoxy molded surface mount package, connected in a series configuration, designed for high speed switching applications.

**MARKING CODE: C5C**

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

Peak Repetitive Reverse Voltage  
Average Forward Current  
Peak Forward Current  
Power Dissipation  
Operating and Storage Junction Temperature  
Thermal Resistance

**SYMBOL**

$V_{RRM}$  100  
 $I_O$  200  
 $I_{FM}$  500  
 $P_D$  350  
 $T_J, T_{stg}$  -65 to +150  
 $\theta_{JA}$  357

**UNITS**

V  
mA  
mA  
mW  
 $^\circ\text{C}$   
 $^\circ\text{C/W}$

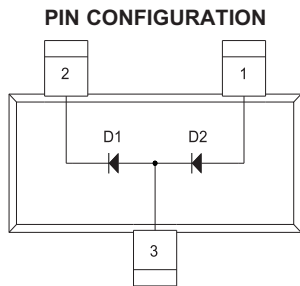
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=50\text{V}$			300	nA
$I_R$	$V_R=50\text{V}, T_A=125^\circ\text{C}$			100	$\mu\text{A}$
$I_R$	$V_R=100\text{V}$			500	nA
$BV_R$	$I_R=100\mu\text{A}$	100			V
$V_F$	$I_F=1.0\text{mA}$	0.55		0.70	V
$V_F$	$I_F=10\text{mA}$	0.67		0.82	V
$V_F$	$I_F=100\text{mA}$	0.75		1.10	V
$C_T$	$V_R=0, f=1.0\text{MHz}$		1.5	2.6	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, R_L=100\Omega, \text{Rec. to } 1.0\text{mA}$		2.0	4.0	ns

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**SOT-23 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**  
 1) Anode D2  
 2) Cathode D1  
 3) Anode D1, Cathode D2

**MARKING CODE: C5C**

<b>DIMENSIONS</b>				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

R7 (27-January 2010)