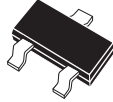


CMPD7000E

**ENHANCED SPECIFICATION  
SURFACE MOUNT  
DUAL PAIR OF SERIES CONFIGURED  
SILICON SWITCHING DIODES**

**ENHANCED  
E  
SPECIFICATION**



**SOT-23 CASE**

**Central™**  
**Semiconductor Corp.**

**DESCRIPTION:**

The Central Semiconductor CMPD7000E is an Enhanced version of the CMPD7000 Dual, Series Configuration, Ultra-High Speed Switching Diode. This device is manufactured by the epitaxial planar process, in an epoxy molded surface mount SOT-23 package, designed for high speed switching applications.

**MARKING CODE: C5CE**

**FEATURED ENHANCED SPECIFICATIONS:**

- ◆  $BV_R$  from 100V min to 120V min.
- ◆  $V_F$  from 1.1V max to 1.0V max.

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

	SYMBOL		UNITS
◆ Peak Repetitive Reverse Voltage	$V_{RRM}$	120	V
Average Forward Current	$I_O$	200	mA
Peak Forward Current	$I_{FM}$	500	mA
Power Dissipation	$P_D$	350	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\Theta_{JA}$	357	$^\circ\text{C/W}$

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

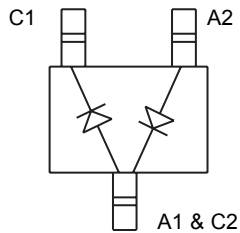
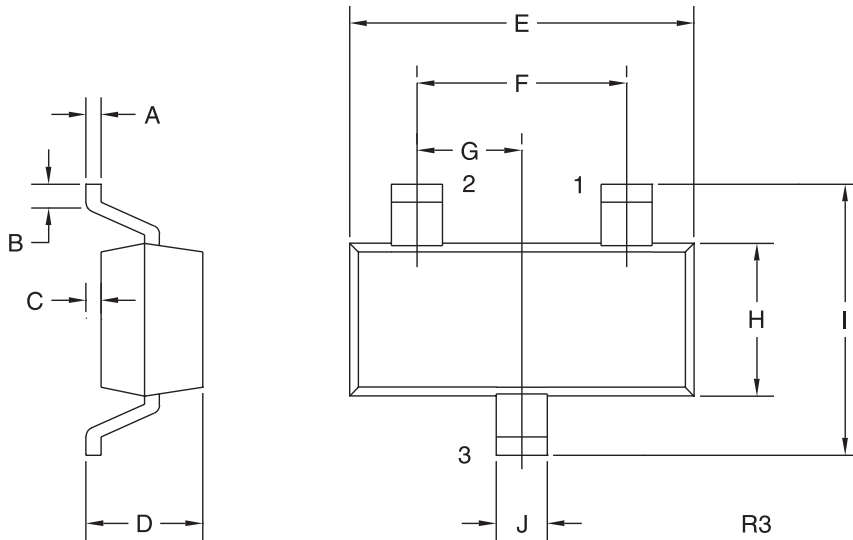
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
◆ $BV_R$	$I_R=100\mu\text{A}$	120	150		V
$I_R$	$V_R=50\text{V}$			300	nA
$I_R$	$V_R=50\text{V}, T_A=125^\circ\text{C}$			100	$\mu\text{A}$
$I_R$	$V_R=100\text{V}$			500	nA
◆ $V_F$	$I_F=1.0\text{mA}$	0.55	0.59	0.65	V
◆ $V_F$	$I_F=10\text{mA}$	0.67	0.72	0.77	V
◆ $V_F$	$I_F=100\text{mA}$	0.85	0.91	1.0	V
$C_T$	$V_R=0, f=1\text{MHz}$			1.5	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

- ◆ Enhanced Specification

R1 (13-November 2002)

**ENHANCED SPECIFICATION  
SURFACE MOUNT  
DUAL PAIR OF SERIES CONFIGURED  
SILICON SWITCHING DIODES**

**SOT-23 CASE - MECHANICAL OUTLINE**



**MARKING CODE: C5CE**

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)