CMPD7000E

ENHANCED SPECIFICATION
SURFACE MOUNT
DUAL, IN SERIES
SILICON SWITCHING DIODES



ENHANCED E SPECIFICATION

SOT-23 CASE

Central Semiconductor Corp.

www.centralsemi.com

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°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	°C
Thermal Resistance	Θ_{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_R	V_R=50V			300	nA
I_R	V_R=50V, T_A=125°C			100	µA
I_R	V_R=100V			500	nA
♦ **BV_R**	**I_R=100µA**	**120**	**150**		**V**
♦ **V_F**	**I_F=1.0mA**	**0.55**	**0.59**	**0.65**	**V**
♦ **V_F**	**I_F=10mA**	**0.67**	**0.72**	**0.77**	**V**
♦ **V_F**	**I_F=100mA**	**0.85**	**0.91**	**1.0**	**V**
C_T	V_R=0, f=1.0MHz		1.5	2.6	pF
t_{rr}	I_R=I_F=10mA, R_L=100Ω, Rec. to 1.0mA		2.0	4.0	ns

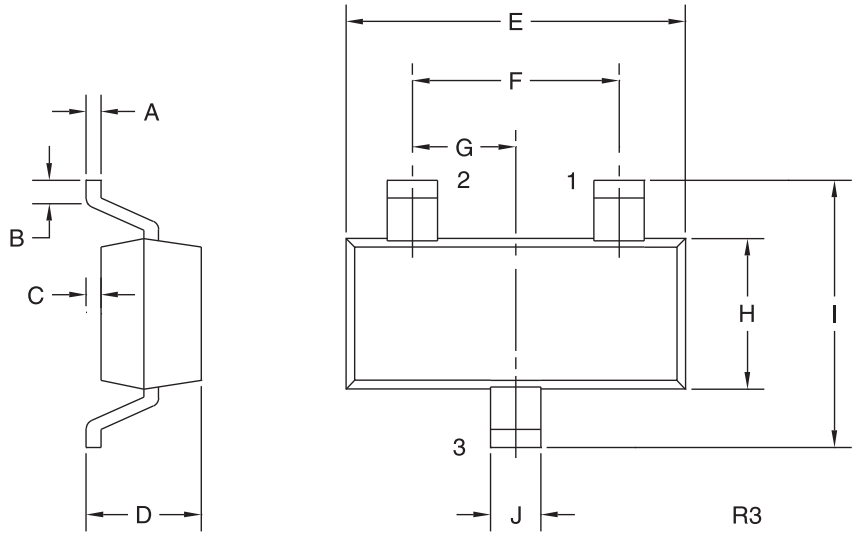
♦ Enhanced Specification

R4 (27-January 2010)

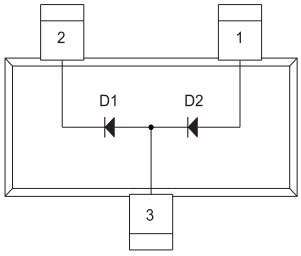
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SOT-23 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



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

MARKING CODE: C5CE

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

R4 (27-January 2010)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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