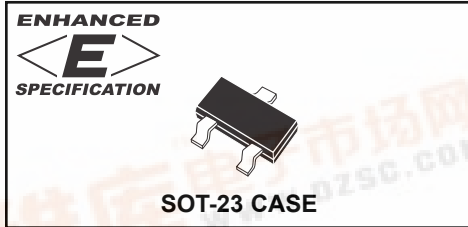


CMPD2836E
CMPD2838E

**ENHANCED SPECIFICATION
SURFACE MOUNT
DUAL, SILICON
SWITCHING DIODES**



Central™ Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor CMPD2836E and CMPD2838E are Enhanced versions of the CMPD2836 and CMPD2838 High Speed Switching Diodes. These devices are manufactured by the epitaxial planar process, in an epoxy molded surface mount SOT-23 package, designed for high speed switching applications.

FEATURED ENHANCED SPECIFICATIONS:

- ◆ BV_R from 75V min to 120V min.
- ◆ V_F from 1.2V max to 1.0V max.

The following configurations are available:
CMPD2836E DUAL, COMMON ANODE
CMPD2838E DUAL, COMMON CATHODE

MARKING CODE: CA2E
MARKING CODE: CA6E

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 (tp=1.0s)	I_{FM}	300 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: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
◆ BV_R	$I_R=100\mu\text{A}$	120	150		V
◆ I_R	$V_R=80\text{V}$			100	nA
◆ V_F	$I_F=10\text{mA}$		0.72	0.85	V
◆ V_F	$I_F=50\text{mA}$		0.84	0.95	V
◆ V_F	$I_F=100\text{mA}$		0.92	1.0	V
C_T	$V_R=0, f=1\text{ MHz}$		1.5	4.0	pF
t_{rr}	$I_R=I_F=10\text{mA}, R_L=100\Omega, \text{Rec. to } 1.0\text{mA}$			4.0	ns

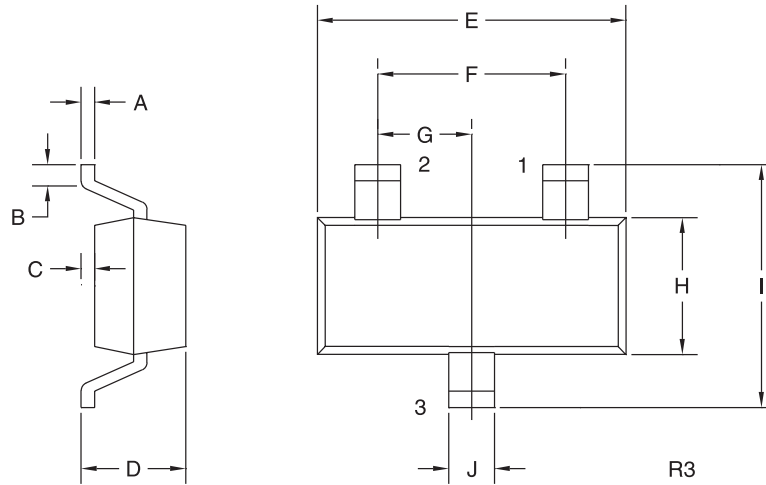
- ◆ Enhanced specification.

R2 (6-August 2003)



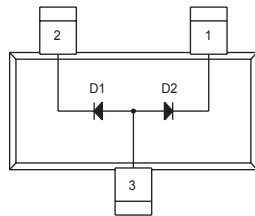
**ENHANCED SPECIFICATION
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SOT-23 CASE - MECHANICAL OUTLINE

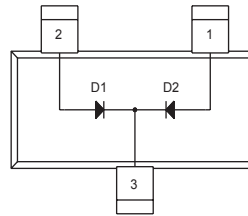


SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)



CMPD2836E
1) Cathode D2
2) Cathode D1
3) Anode D1, Anode D2
MARKING CODE: CA2E



CMPD2838E
1) Anode D2
2) Anode D1
3) Cathode D1, Cathode D2
MARKING CODE: CA6E