

CMPD2836E
CMPD2838E

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



www.centrasemi.com



SOT-23 CASE

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

- ◆ **Peak Repetitive Reverse Voltage**
- Average Forward Current
- Peak Forward Current, $t_p=1.0s$
- Power Dissipation
- Operating and Storage Junction Temperature
- Thermal Resistance

SYMBOL

V_{RRM}	120
I_O	200
I_{FM}	300
P_D	350
T_J, T_{stg}	-65 to +150
Θ_{JA}	357

UNITS

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

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
◆ I_R	$V_R=80V$			100	nA
◆ BV_R	$I_R=100\mu\text{A}$	120	150		V
◆ 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	$V_R=0, f=1.0\text{MHz}$		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

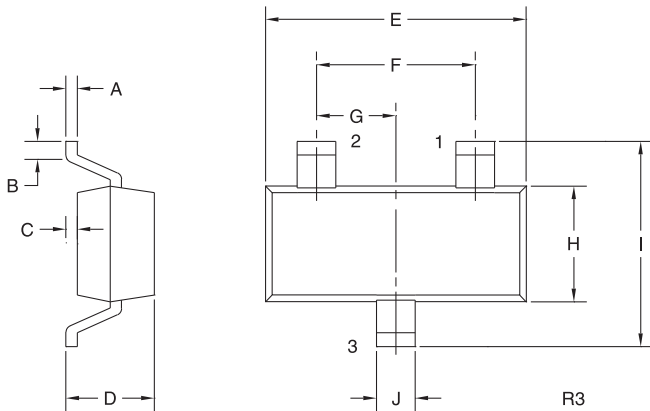
◆ Enhanced specification

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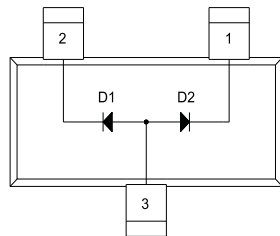
SOT-23 CASE - MECHANICAL OUTLINE



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)

PIN CONFIGURATIONS

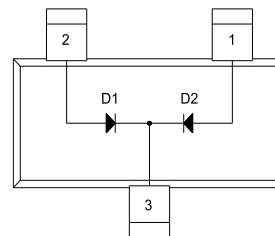


CMPD2836E

LEAD CODE:

- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, D2

MARKING CODE: CA2E



CMPD2838E

LEAD CODE:

- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, D2

MARKING CODE: CA6E

R3 (25-January 2010)