

CMPD2836E  
CMPD2838E

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



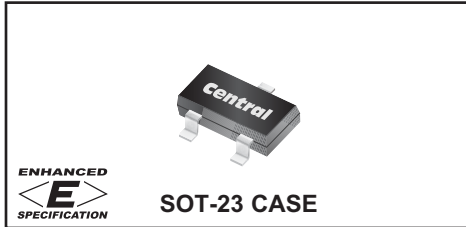
www.centrasemi.com

**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,  $t_p=1.0\text{s}$
- 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
$\Theta_{JA}$	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
◆ $I_R$	$V_R=80\text{V}$			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

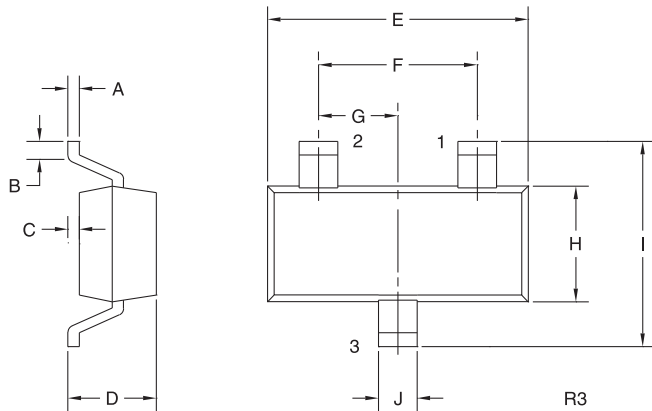
◆ Enhanced specification

CMPD2836E  
CMPD2838E



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

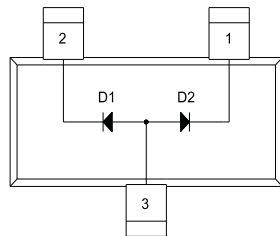
**SOT-23 CASE - MECHANICAL OUTLINE**



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**

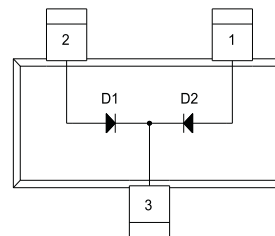


**CMPD2836E**

**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)