

CMSD2836  
CMSD2838

SURFACE MOUNT  
DUAL SILICON  
SWITCHING DIODES

**SUPERmini™**



SOT-323 CASE



[www.centralsemi.com](http://www.centralsemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSD2836 and CMSD2838 are ultra-high speed silicon switching diodes manufactured by the epitaxial planar process, in an epoxy molded SUPERmini™ surface mount package, designed for high speed switching applications.

The following configurations are available:

**CMSD2836** DUAL, COMMON ANODE  
**CMSD2838** DUAL, COMMON CATHODE

**MARKING CODE: A2C**  
**MARKING CODE: A6C**

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

Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Average Forward Current	$I_O$	200	mA
Peak Forward Current, $t_p=1.0\text{s}$	$I_{FM}$	300	mA
Power Dissipation	$P_D$	275	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\Theta_{JA}$	455	$^\circ\text{C}/\text{W}$

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

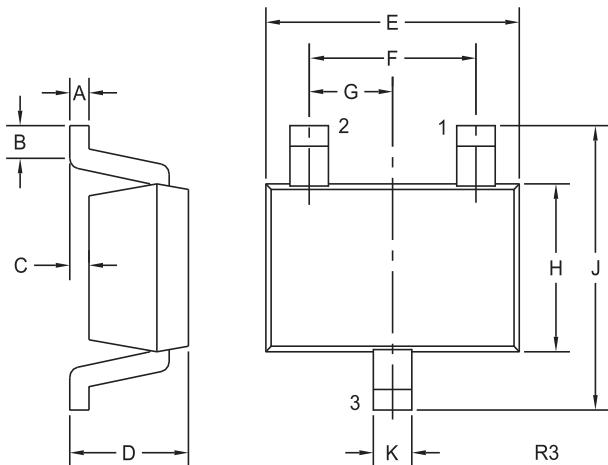
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=50\text{V}$			100	nA
$BV_R$	$I_R=100\mu\text{A}$	75			V
$V_F$	$I_F=10\text{mA}$			1.0	V
$V_F$	$I_F=50\text{mA}$			1.0	V
$V_F$	$I_F=100\text{mA}$			1.2	V
$C_T$	$V_R=0, f=1.0\text{MHz}$		1.5	4.0	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$			4.0	ns

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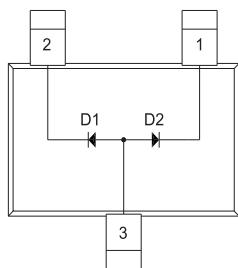
SOT-323 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.002	0.008	0.05	0.20
B	0.004	-	0.10	-
C	-	0.004	-	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.045	0.053	1.15	1.35
J	0.079	0.087	2.00	2.20
K	0.008	0.016	0.20	0.40

SOT-323 (REV: R3)

PIN CONFIGURATIONS

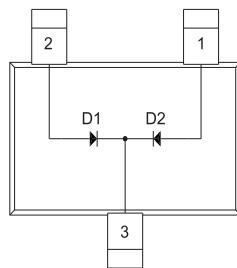


CMSD2836

LEAD CODE:

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

MARKING CODE: A2C



CMSD2838

LEAD CODE:

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

MARKING CODE: A6C

R4 (8-February 2010)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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### 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).

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### CONTACT US

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