

CMSD2836  
CMSD2838

**SUPERmini™  
DUAL SILICON  
SWITCHING DIODE**

**SUPERmini™**



**SOT-323 CASE**

**Central™**  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSD2836 and CMSD2838 types 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  
CMSD2838

DUAL, COMMON ANODE  
DUAL, COMMON CATHODE

MARKING CODE: A2C  
MARKING CODE: A6C

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

	<b>SYMBOL</b>		<b>UNITS</b>
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Average Forward Current	$I_O$	200	mA
Peak Forward Current	$I_{FM}$	300	mA
Power Dissipation	$P_D$	250	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	500	$^\circ\text{C/W}$

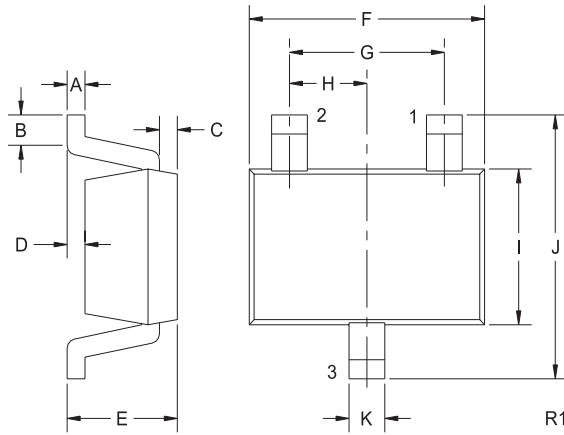
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$B_{VR}$	$I_R=100\mu\text{A}$	75			V
$I_R$	$V_R=50\text{V}$			100	nA
$V_F$	$I_F=10\text{mA}$			1.0	V
$V_F$	$I_F=50\text{mA}$			1.0	V
$V_F$	$I_F=100\text{mA}$			1.2	V
$C_T$	$V_R=0, f=1\text{ MHz}$		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

R1 ( 30-August 2001)

**SUPERmini**<sup>™</sup>  
**DUAL SILICON**  
**SWITCHING DIODE**

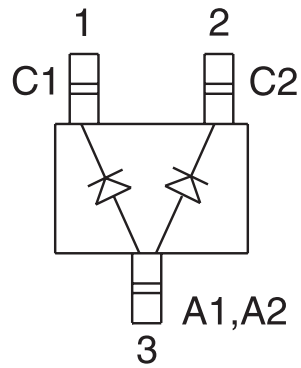
**SOT-323 CASE - MECHANICAL OUTLINE**



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.008	0.10	0.20
B	0.004	-	0.10	-
C	0.004	0.008	0.10	0.20
D	-	0.004	-	0.10
E	0.031	0.043	0.80	1.10
F	0.071	0.087	1.80	2.20
G	0.051		1.30	
H	0.026		0.65	
I	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

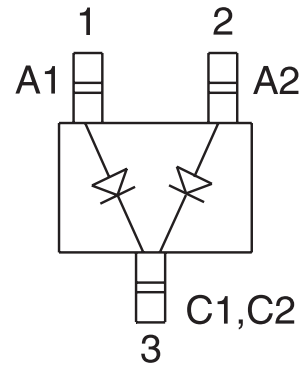
SOT-323 (REV: R1)

**Bottom View**



**CMSD2836**

**Bottom View**



**CMSD2838**