

**CMLD2838**  
**SURFACE MOUNT**  
**PICOMini™**  
**DUAL PAIR,**  
**SILICON SWITCHING DIODES**



# Central™

**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMLD2838 type is a dual pair of common cathode silicon switching diodes manufactured by the epitaxial planar process and packaged in an epoxy molded PICOMini™ surface mount case. This device is ideal for high speed switching applications.

**MARKING CODE:** CSQ

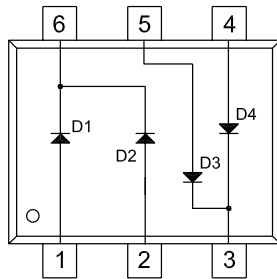
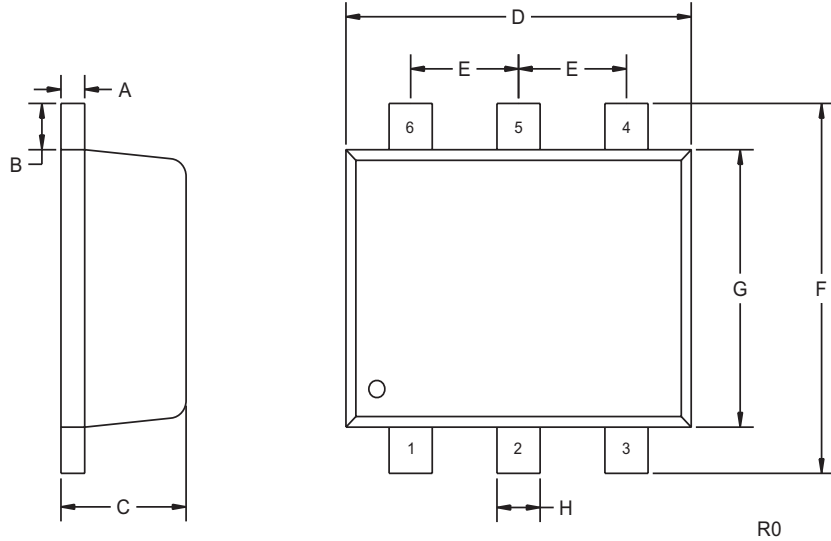
**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

	<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>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=50\text{V}$		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
$C_T$	$V_R=0, f=1\text{ MHz}$		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

**SOT-563 CASE - MECHANICAL OUTLINE**



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.10	0.18
B	0.008		0.20	
C	0.022	0.024	0.56	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.061	0.067	1.55	1.70
G	0.047		1.20	
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R0)

**CMLD2838**

Lead Code:

- 1) Anode D1
- 2) Anode D2
- 3) Cathode D3, D4
- 4) Anode D4
- 5) Anode D3
- 6) Cathode D1, D2

**MARKING CODE: CSQ**

R0 (22-March 2005)