

CMLD2838

**SURFACE MOUNT SILICON  
DUAL PAIR  
SWITCHING DIODE**



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



**SOT-563 CASE**

**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 SOT-563 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	$^\circ\text{C/W}$

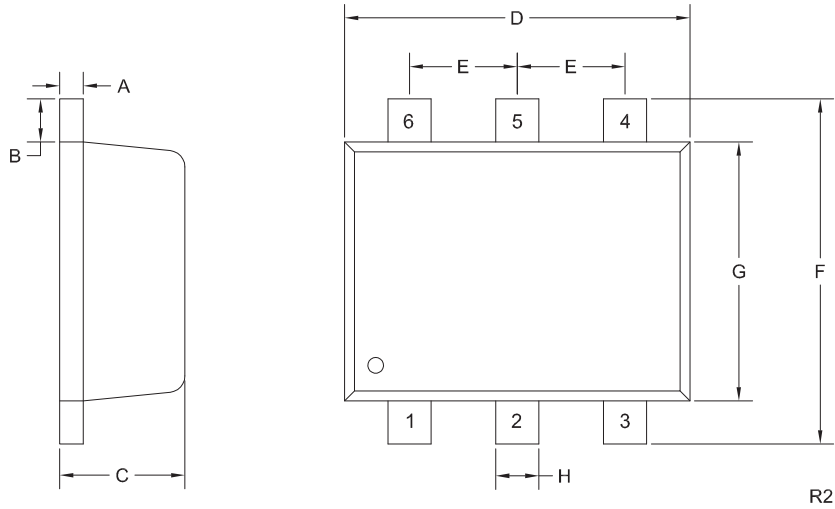
**ELECTRICAL CHARACTERISTICS PER DIODE: ( $T_A=25^\circ\text{C}$  unless otherwise noted)**

<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
$C_J$	$V_R=0, f=1.0\text{MHz}$		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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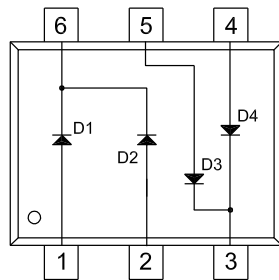


**SOT-563 CASE - MECHANICAL OUTLINE**



R2

**PIN CONFIGURATION**



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.0027	0.007	0.07	0.18
B	0.008		0.20	
C	0.017	0.024	0.45	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.059	0.067	1.50	1.70
G	0.043	0.051	1.10	1.30
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R2)

**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**

R3 (15-June 2015)

## 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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### CONTACT US

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