

CMLD2838

**SURFACE MOUNT SILICON
DUAL PAIR
SWITCHING DIODE**



SOT-563 CASE



www.centra-semi.com

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

Peak Repetitive Reverse Voltage
Average Forward Current
Peak Forward Current
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_{RRM}	75
I_O	200
I_{FM}	300
P_D	250
T_J, T_{stg}	-65 to +150
θ_{JA}	500

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	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_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

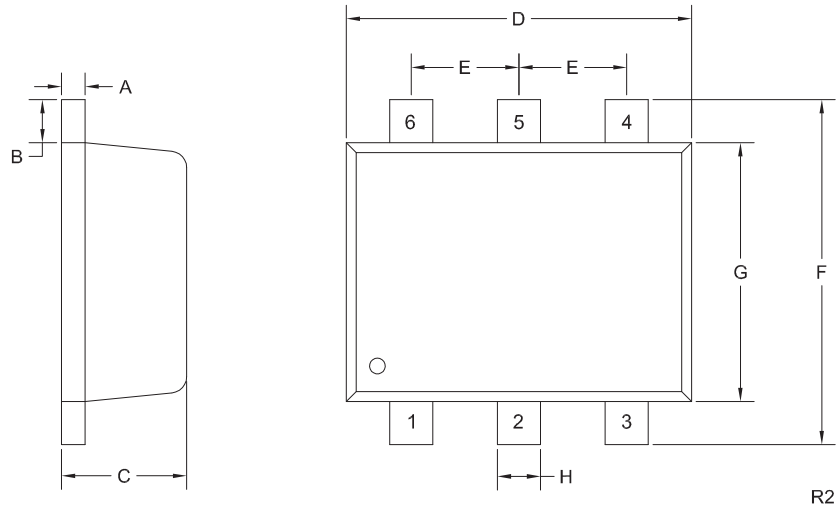
R3 (15-June 2015)

CMLD2838

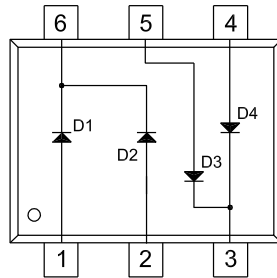
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SOT-563 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



DIMENSIONS

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

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SERVICES

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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R3 (15-June 2015)