

CMLSH05-4

SURFACE MOUNT SILICON
LOW V_F
SCHOTTKY DIODE



SOT-563 CASE

Central
Semiconductor Corp.

www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLSH05-4 is a 40 volt Schottky diode packaged in a space saving SOT-563 surface mount case. This device has been designed for applications requiring a low forward voltage drop.

MARKING CODE: C54

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

Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current, $t_p \leq 1.0\text{ms}$
Peak Forward Surge Current, $t_p = 8.0\text{ms}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL		UNITS
V_{RRM}	40	V
I_F	500	mA
I_{FRM}	3.5	A
I_{FSM}	10	A
P_D	250	mW
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
θ_{JA}	500	$^\circ\text{C/W}$

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

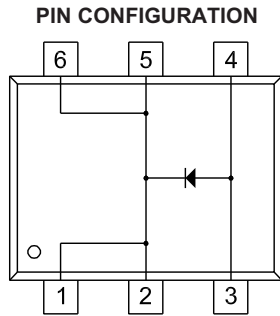
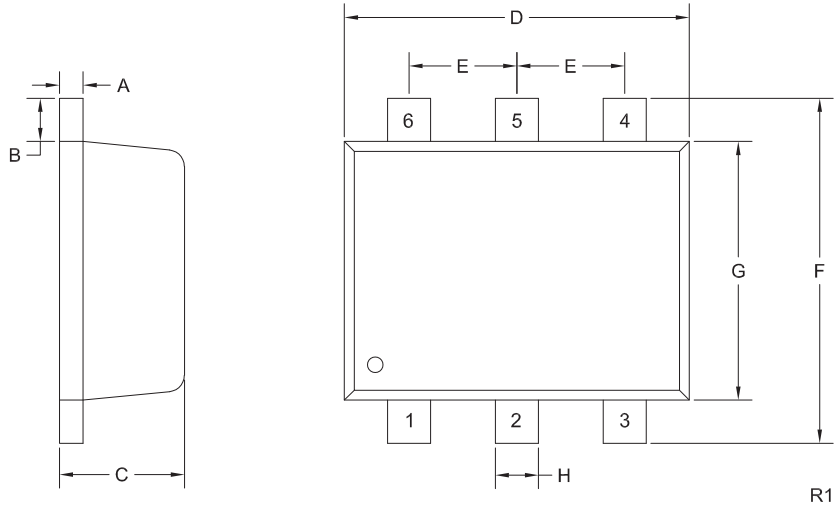
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=10\text{V}$		20	μA
I_R	$V_R=30\text{V}$		100	μA
BV_R	$I_R=500\mu\text{A}$	40		V
V_F	$I_F=100\mu\text{A}$		0.13	V
V_F	$I_F=1.0\text{mA}$		0.21	V
V_F	$I_F=10\text{mA}$		0.27	V
V_F	$I_F=100\text{mA}$		0.35	V
V_F	$I_F=500\text{mA}$		0.47	V
C_J	$V_R=1.0\text{V}, f=1.0\text{MHz}$		50	pF

R3 (14-February 2014)

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SOT-563 CASE - MECHANICAL OUTLINE



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	0.061	0.067	1.55	1.70
G	0.045	0.049	1.15	1.25
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R1)

LEAD CODE:

- 1) Cathode
- 2) Cathode
- 3) Anode
- 4) Anode
- 5) Cathode
- 6) Cathode

MARKING CODE: C54

R3 (14-February 2014)