

CMLSH1-40
CMLSH1-40G*

SURFACE MOUNT
HIGH CURRENT, LOW V_F
SILICON SCHOTTKY RECTIFIER

PICOmini™



SOT-563 CASE

* Device is **Halogen Free** by design



www.centralemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLSH1-40 is a 40 volt Schottky Rectifier packaged in a space saving SOT-563 surface mount case. This PICOmini™ device has been designed for applications requiring high current and a low forward voltage drop.

MARKING CODES: CMLSH1-40: C41
CMLSH1-40G*: CG4

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

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

SYMBOL

V_{RRM} 40
 I_F 1.0
 I_{FRM} 3.5
 I_{FSM} 10
 P_D 250
 T_J, T_{stg} -65 to +150
 Θ_{JA} 500

UNITS

V
A
A
A
mW
 $^{\circ}\text{C}$
 $^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=5.0\text{V}$			10	μA
I_R	$V_R=8.0\text{V}$			20	μA
I_R	$V_R=15\text{V}$			50	μA
BV_R	$I_R=100\mu\text{A}$	40			V
V_F	$I_F=10\text{mA}$			0.29	V
V_F	$I_F=100\text{mA}$			0.36	V
V_F	$I_F=500\text{mA}$			0.45	V
V_F	$I_F=1.0\text{A}$			0.55	V
C_J	$V_R=4.0\text{V}$, $f=1.0\text{MHz}$		50		pF
t_{rr}	$I_F=I_R=500\text{mA}$, $I_{rr}=50\text{mA}$, $R_L=50\Omega$		15		ns

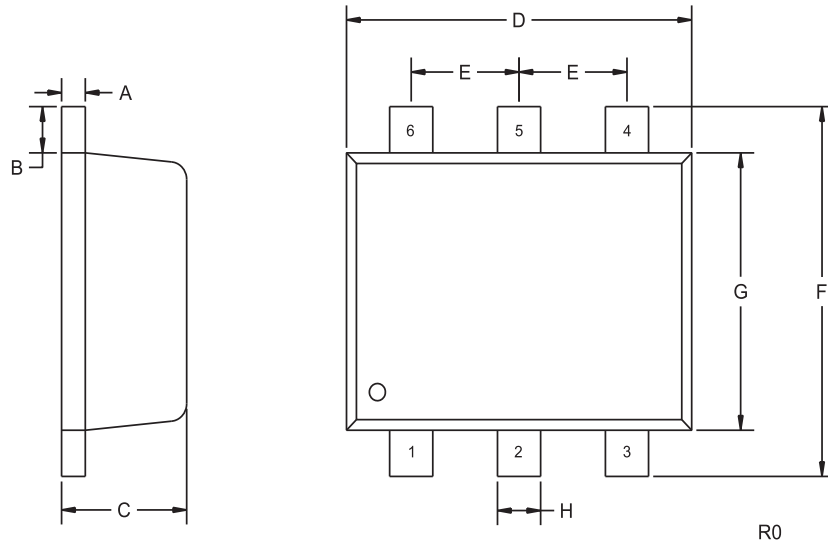
R3 (20-January 2010)

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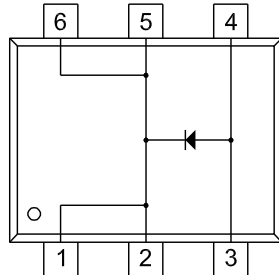
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SOT-563 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

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

DIMENSIONS

SYMBOL	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)

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