

Central Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLSH1-40 is a 40 volt Schottky Diode 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 CODE: C41



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

	SYMBOL	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	V
Continuous Forward Current	I_F	A
Peak Repetitive Forward Current, $t_p \leq 1\text{ms}$	I_{FRM}	A
Forward Surge Current, $t_p=8\text{ms}$	I_{FSM}	A
Power Dissipation	P_D	mW
Operating and Storage		
Junction Temperature	T_J, T_{stg}	$^\circ\text{C}$
Thermal Resistance	Θ_{JA}	$^\circ\text{C}/\text{W}$

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

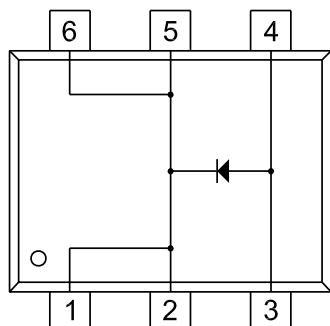
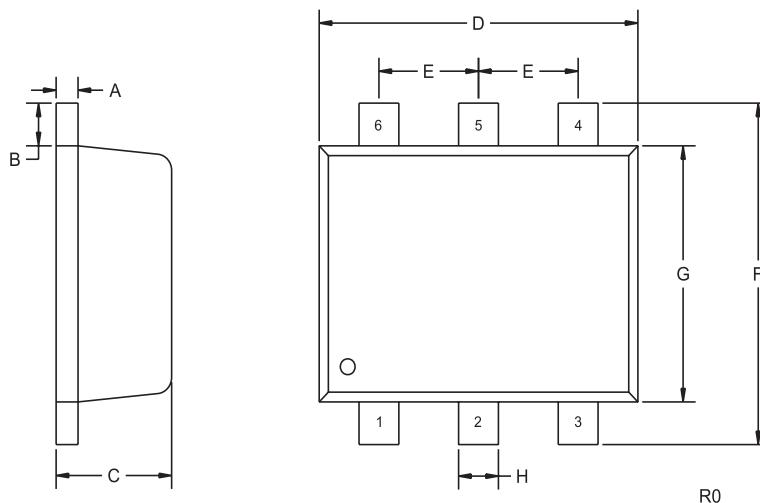
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R= 5\text{V}$			10	μA
I_R	$V_R= 8\text{V}$			20	μA
I_R	$V_R= 15\text{V}$			50	μA
BV_R	$I_R= 100\mu\text{A}$	40			V
V_F	$I_F= 10\text{mA}$			0.29	V
V_F	$I_F= 100\text{mA}$			0.36	V
V_F	$I_F= 500\text{mA}$			0.45	V
V_F	$I_F= 1.0\text{A}$			0.55	V
C_J	$V_R= 4.0\text{V}, f= 1.0\text{MHz}$	50			pF
t_{rr}	$I_F=I_R= 500\text{mA}, I_{rr}= 50\text{mA}, R_L= 50\Omega$	15			ns

CentralTM
Semiconductor Corp.

CMLSH1-40

SURFACE MOUNT PICOMiniTM
HIGH CURRENT, LOW V_F
SILICON SCHOTTKY DIODE

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)

LEAD CODE:

- 1) CATHODE
- 2) CATHODE
- 3) ANODE
- 4) ANODE
- 5) CATHODE
- 6) CATHODE

MARKING CODE: C41

R1 (15-June 2006)