



**CMLSH1-40**  
**CMLSH1-40G**

**SURFACE MOUNT PICOmini™**  
**HIGH CURRENT, LOW V<sub>F</sub>**  
**SILICON SCHOTTKY RECTIFIER**

**PICOmini™**



**SOT-563 CASE**

# Central™

## Semiconductor Corp.

### 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**

- The CMLSH1-40G is **Halogen Free** by design.

### MAXIMUM RATINGS: (T<sub>A</sub>=25°C)

Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current, tp ≤ 1ms
Forward Surge Current, tp=8ms
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

### SYMBOL

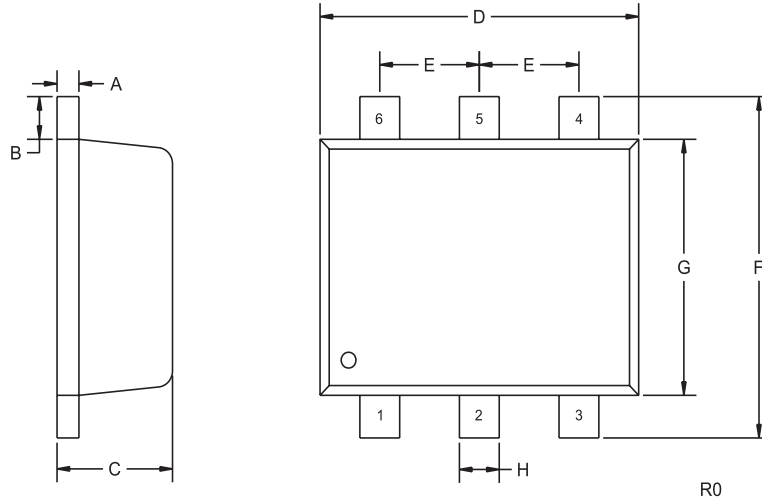
### UNITS

V <sub>R</sub> RM	40	V
I <sub>F</sub>	1.0	A
I <sub>F</sub> RM	3.5	A
I <sub>F</sub> SM	10	A
P <sub>D</sub>	250	mW
T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Θ <sub>JA</sub>	500	°C/W

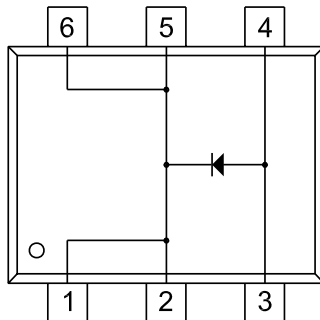
### ELECTRICAL CHARACTERISTICS: (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =5V			10	μA
I <sub>R</sub>	V <sub>R</sub> =8V			20	μA
I <sub>R</sub>	V <sub>R</sub> =15V			50	μA
BV <sub>R</sub>	I <sub>R</sub> =100μA	40			V
V <sub>F</sub>	I <sub>F</sub> =10mA			0.29	V
V <sub>F</sub>	I <sub>F</sub> =100mA			0.36	V
V <sub>F</sub>	I <sub>F</sub> =500mA			0.45	V
V <sub>F</sub>	I <sub>F</sub> =1.0A			0.55	V
C <sub>J</sub>	V <sub>R</sub> =4.0V, f= 1.0MHz		50		pF
t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =500mA, I <sub>rr</sub> =50mA, R <sub>L</sub> =50Ω		15		ns

**SOT-563 CASE - MECHANICAL OUTLINE**



**PIN CONFIGURATION**



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

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