

New  
To This  
Edition

### CMLSH-4

**SURFACE MOUNT PICOmini™  
DUAL, ISOLATED  
SILICON  
SCHOTTKY DIODES**

**PICOmini™**



**SOT-563 CASE**

# Central™

**Semiconductor Corp.**

#### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLSH-4 are two individual electrically isolated 40 volt Schottky Diodes, in a space saving SOT-563 surface mount package. This PICOmini™ device has been designed for applications requiring fast switching speeds and a low forward voltage drop.

**MARKING CODE: C4E**

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

Peak Repetitive Reverse Voltage	40
Continuous Forward Current	200
Peak Repetitive Forward Current	350
Forward Surge Current, tp=10ms	750
Power Dissipation	250
Operating and Storage	-65 to +150
Junction Temperature	°C
Thermal Resistance	500

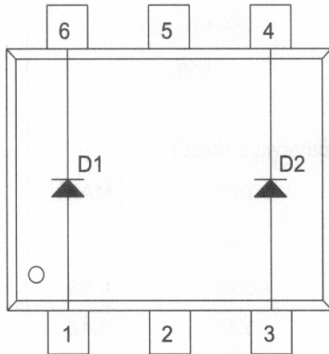
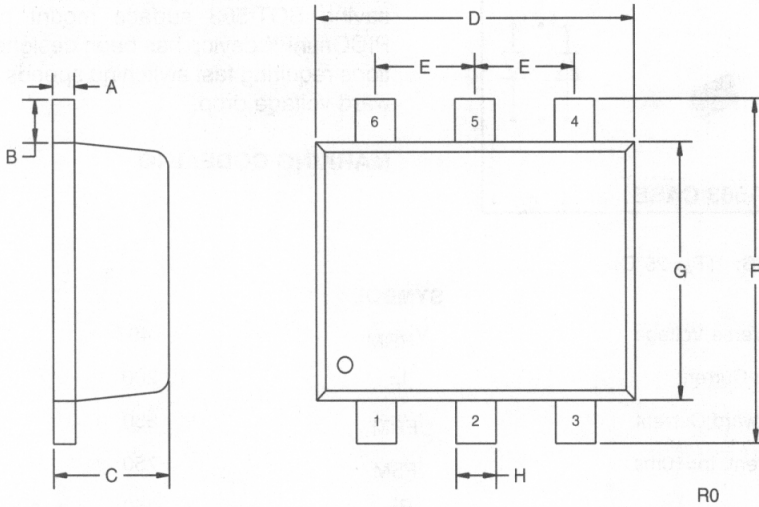
#### SYMBOL

SYMBOL		UNITS
V <sub>RRM</sub>	40	V
I <sub>F</sub>	200	mA
I <sub>FRM</sub>	350	mA
I <sub>FSM</sub>	750	mA
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 PER DIODE: (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
B <sub>VR</sub>	I <sub>R</sub> =100μA	40	50		V
V <sub>F</sub>	I <sub>F</sub> =2.0mA		0.29	0.33	V
V <sub>F</sub>	I <sub>F</sub> =15mA		0.37	0.42	V
V <sub>F</sub>	I <sub>F</sub> =100mA		0.61	0.80	V
V <sub>F</sub>	I <sub>F</sub> =200mA		0.65	1.0	V
I <sub>R</sub>	V <sub>R</sub> =25V		90	500	nA
I <sub>R</sub>	V <sub>R</sub> =25V, T <sub>A</sub> =100°C		25	100	μA
C <sub>T</sub>	V <sub>R</sub> =1.0V, f=1.0 MHz		7.0		pF
t <sub>rr</sub>	I <sub>F</sub> =10mA, I <sub>rr</sub> =1.0mA, R <sub>L</sub> =100Ω			5.0	ns

**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) ANODE D1
- 2) NC
- 3) ANODE D2
- 4) CATHODE D2
- 5) NC
- 6) CATHODE D1

**MARKING CODE: C4E**

DATA SHEETS