



CMLSH2-4LA CMLSH2-4LS
CMLSH2-4LC CMLSH2-4LSB

**SURFACE MOUNT
DUAL PAIR, LOW V_F
SILICON SCHOTTKY DIODES**

PICOmini™



SOT-563 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLSH2-4L Series consists of Dual pairs of Common Anode, Common Cathode, and In-Series Low V_F Schottky Diodes, manufactured in a PICOmini™ SOT-563 surface mount package.

- Devices are **Halogen Free** by design

DEVICE CONFIGURATIONS:

CMLSH2-4LA DUAL PAIR, COMMON ANODE
CMLSH2-4LC DUAL PAIR, COMMON CATHODE
CMLSH2-4LS DUAL PAIR, IN SERIES
CMLSH2-4LSB DUAL PAIR, IN SERIES

MARKING CODE: 4AL
MARKING CODE: 4CL
MARKING CODE: 4SL
MARKING CODE: 4SB

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

Peak Repetitive Reverse Voltage

SYMBOL

V_{RRM}

40

UNITS

V

Continuous Forward Current

I_F

200

mA

Peak Repetitive Forward Current

I_{FRM}

300

mA

Forward Surge Current, $t_p=10\text{ms}$

I_{FSM}

600

mA

Power Dissipation (Note 1)

P_D

350

mW

Power Dissipation (Note 2)

P_D

300

mW

Power Dissipation (Note 3)

P_D

150

mW

Operating and Storage Junction Temperature

T_J, T_{stg}

-65 to +150

$^\circ\text{C}$

Thermal Resistance (Note 1)

Θ_{JA}

357

$^\circ\text{C/W}$

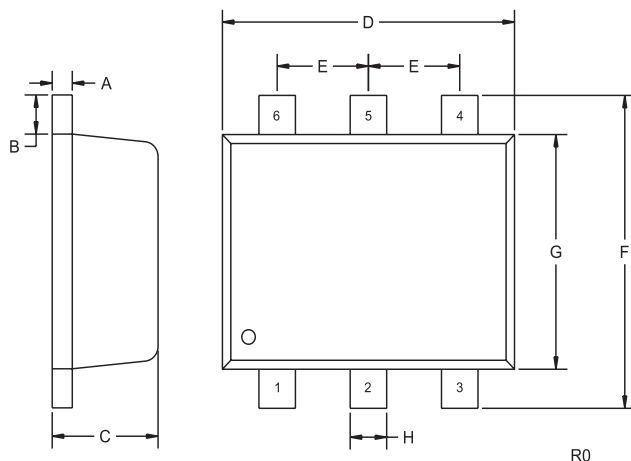
ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
I_R	$V_R=30\text{V}$		100	200	nA
BV_R	$I_R=100\mu\text{A}$	40	55		V
V_F	$I_F=100\mu\text{A}$		0.24	0.26	V
V_F	$I_F=500\mu\text{A}$		0.29	0.31	V
V_F	$I_F=1.0\text{mA}$		0.31	0.33	V
V_F	$I_F=50\text{mA}$		0.54	0.60	V
V_F	$I_F=100\text{mA}$		0.67	0.75	V
C_T	$V_R=1.0\text{V}, f=1.0\text{MHz}$			10	pF
t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$			5.0	ns

Notes: (1) Ceramic or aluminum core PC Board with copper mounting pad area of 4.0 mm²
(2) FR-4 Epoxy PC Board with copper mounting pad area of 4.0 mm²
(3) FR-4 Epoxy PC Board with copper mounting pad area of 1.4 mm²

R2 (17-August 2009)

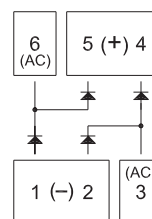
SOT-563 CASE - MECHANICAL OUTLINE



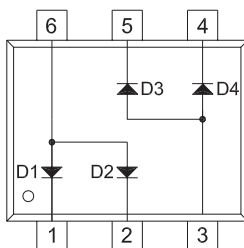
SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.10	0.18
B	0.008		0.20	
C	0.022	0.024	0.56	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.061	0.067	1.55	1.70
G	0.047		1.20	
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R0)

SUGGESTED MOUNTING PAD CONFIGURATION (FOR CMLSH2-4LSB BRIDGE RECTIFIER)



PIN CONFIGURATIONS

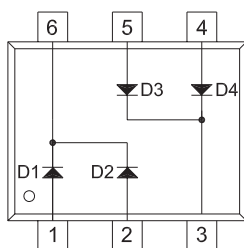


CMLSH2-4LA

LEAD CODE:

- 1) CATHODE D1
- 2) CATHODE D2
- 3) ANODE D3, D4
- 4) CATHODE D4
- 5) CATHODE D3
- 6) ANODE D1, D2

MARKING CODE: 4AL

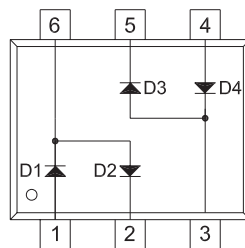


CMLSH2-4LC

LEAD CODE:

- 1) ANODE D1
- 2) ANODE D2
- 3) CATHODE D3, D4
- 4) ANODE D4
- 5) ANODE D3
- 6) CATHODE D1, D2

MARKING CODE: 4CL

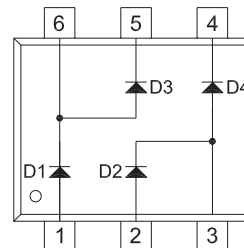


CMLSH2-4LS

LEAD CODE:

- 1) ANODE D1
- 2) CATHODE D2
- 3) ANODE D3, CATHODE D4
- 4) ANODE D4
- 5) CATHODE D3
- 6) CATHODE D1, ANODE D2

MARKING CODE: 4SL



CMLSH2-4LSB

LEAD CODE:

- 1) ANODE D1
- 2) ANODE D2
- 3) CATHODE D2, ANODE D4
- 4) CATHODE D4
- 5) CATHODE D3
- 6) CATHODE D1, ANODE D3

MARKING CODE: 4SB

Typical Electrical Characteristics
Surface Mount
Dual Pair, Low V_F
Silicon Schottky Diodes

