

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

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



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMLSH2-4LA 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.

PICOmini™



SOT-563 CASE

• Devices are *Halogen Free* by design

**DEVICE CONFIGURATIONS:**

CMLSH2-4LA	DUAL PAIR, COMMON ANODE	<b>MARKING CODE: 4AL</b>
CMLSH2-4LC	DUAL PAIR, COMMON CATHODE	<b>MARKING CODE: 4CL</b>
CMLSH2-4LS	DUAL PAIR, IN SERIES	<b>MARKING CODE: 4SL</b>

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

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Continuous Forward Current	$I_F$	200	mA
Peak Repetitive Forward Current	$I_{FRM}$	300	mA
Peak 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)	$\theta_{JA}$	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
$I_R$	$V_R=25\text{V}$		100	500	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
$C_J$	$V_R=1.0\text{V}, f=1.0\text{MHz}$			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  $4.0\text{mm}^2$   
 (2) FR-4 Epoxy PC Board with copper mounting pad area of  $4.0\text{mm}^2$   
 (3) FR-4 Epoxy PC Board with copper mounting pad area of  $1.4\text{mm}^2$

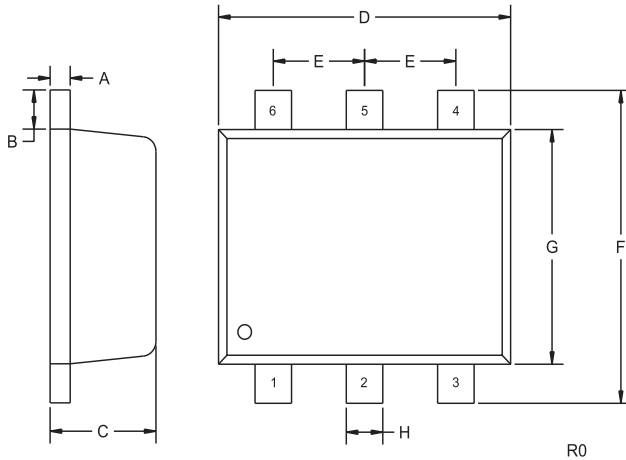
R5 (18-October 2012)

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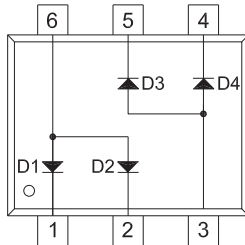
SOT-563 CASE - MECHANICAL OUTLINE



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)

PIN CONFIGURATIONS

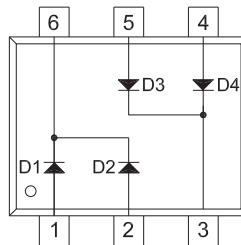


**CMLSH2-4LA**

**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**

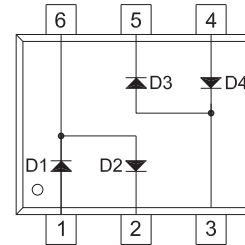


**CMLSH2-4LC**

**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**

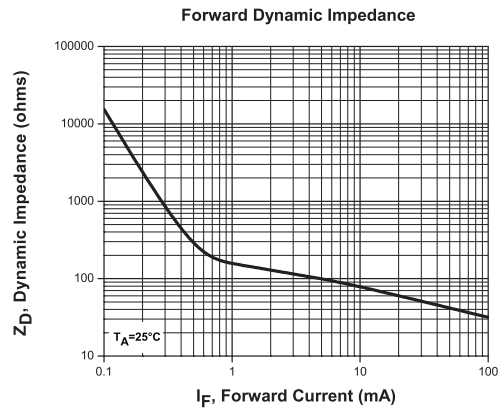
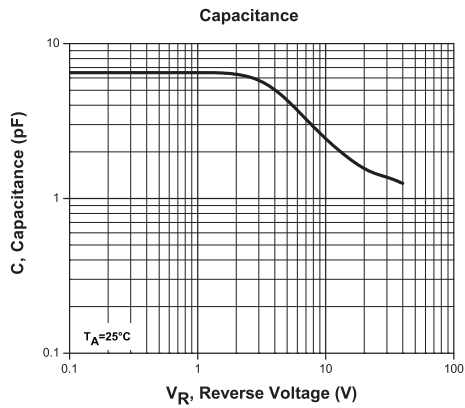
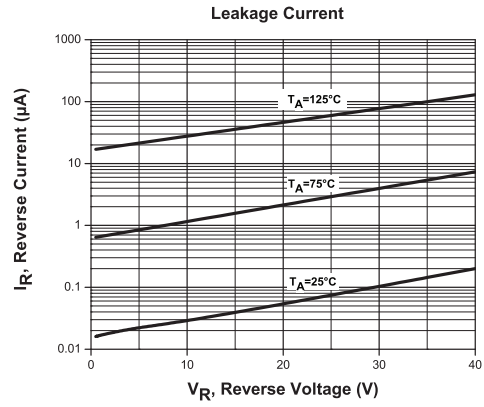
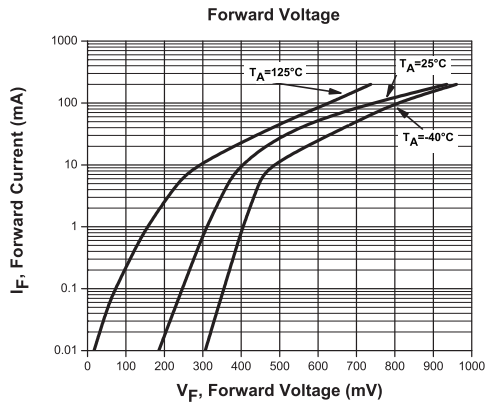
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TYPICAL ELECTRICAL CHARACTERISTICS



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