

**CMLSH-4DO****SURFACE MOUNT SILICON  
DUAL, ISOLATED OPPOSING  
SCHOTTKY DIODE**
[www.centrasemi.com](http://www.centrasemi.com)
**DESCRIPTION:**

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

**MARKING CODE: L40****SOT-563 CASE****MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Continuous Forward Current	$I_F$	200	mA
Peak Repetitive Forward Current	$I_{FRM}$	350	mA
Peak Forward Surge Current, $t_p=10\text{ms}$	$I_{FSM}$	750	mA
Power Dissipation	$P_D$	250	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\Theta_{JA}$	500	$^\circ\text{C/W}$

**SYMBOL**

SYMBOL	UNITS
$V_{RRM}$	V
$I_F$	mA
$I_{FRM}$	mA
$I_{FSM}$	mA
$P_D$	mW
$T_J, T_{stg}$	$^\circ\text{C}$
$\Theta_{JA}$	$^\circ\text{C/W}$

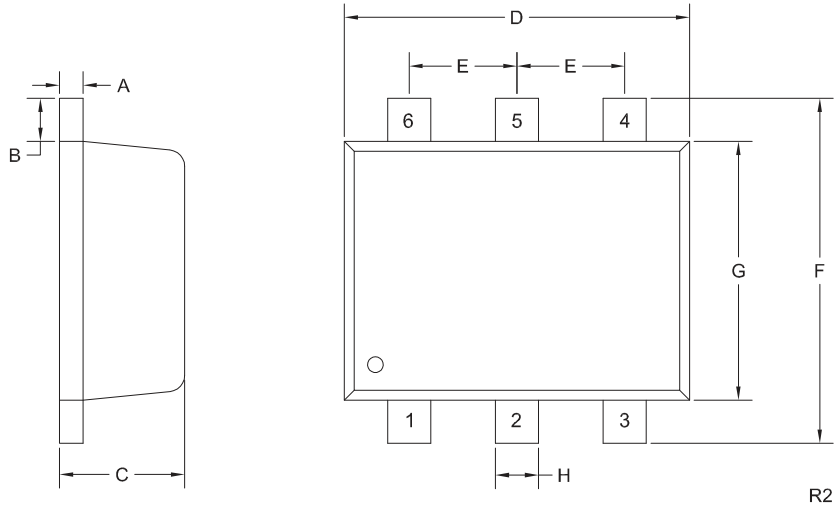
**UNITS****ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=25\text{V}$		90	500	nA
$I_R$	$V_R=25\text{V}, T_A=100^\circ\text{C}$		25	100	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	40	50		V
$V_F$	$I_F=2.0\text{mA}$		0.29	0.33	V
$V_F$	$I_F=15\text{mA}$		0.37	0.42	V
$V_F$	$I_F=100\text{mA}$		0.51	0.80	V
$V_F$	$I_F=200\text{mA}$		0.65	1.0	V
$C_J$	$V_R=1.0\text{V}, f=1.0\text{MHz}$		7.0		pF
$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$			5.0	ns

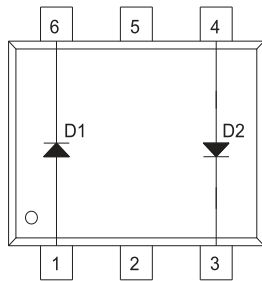
**CMLSH-4DO**  
**SURFACE MOUNT SILICON**  
**DUAL, ISOLATED OPPOSING**  
**SCHOTTKY DIODE**



**SOT-563 CASE - MECHANICAL OUTLINE**



**PIN CONFIGURATION**



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.0027	0.007	0.07	0.18
B	0.008		0.20	
C	0.017	0.024	0.45	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.059	0.067	1.50	1.70
G	0.043	0.051	1.10	1.30
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R2)

**LEAD CODE:**

- 1) Anode D1
- 2) NC
- 3) Cathode D2
- 4) Anode D2
- 5) NC
- 6) Cathode D1

**MARKING CODE: L40**

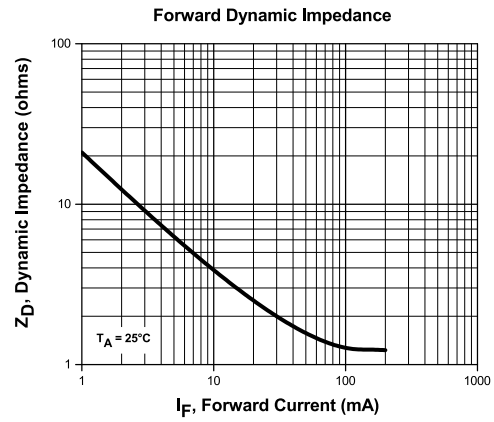
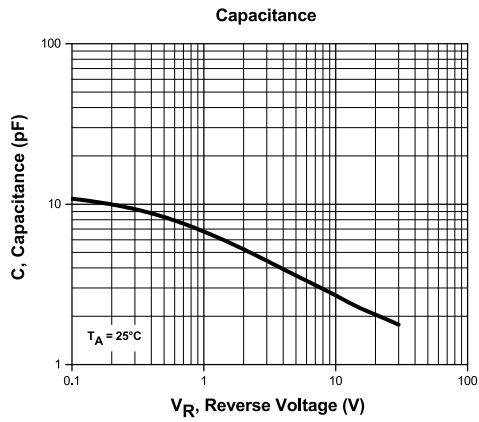
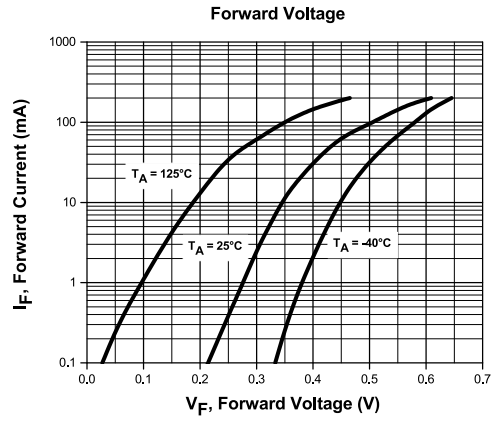
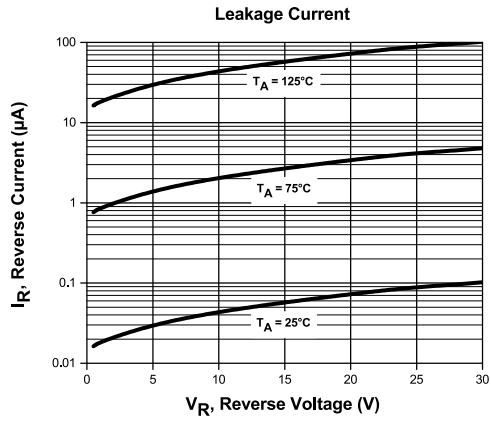
R6 (16-February 2016)

CMLSH-4DO

SURFACE MOUNT SILICON  
DUAL, ISOLATED OPPOSING  
SCHOTTKY DIODE



TYPICAL ELECTRICAL CHARACTERISTICS



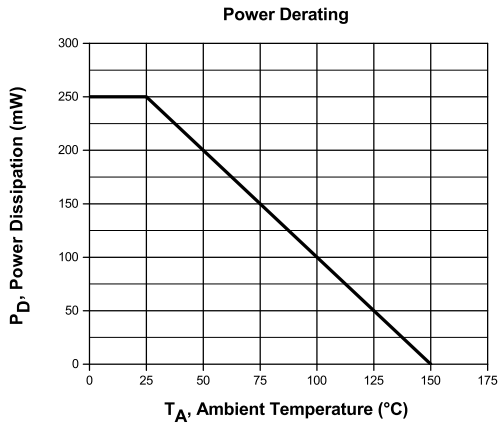
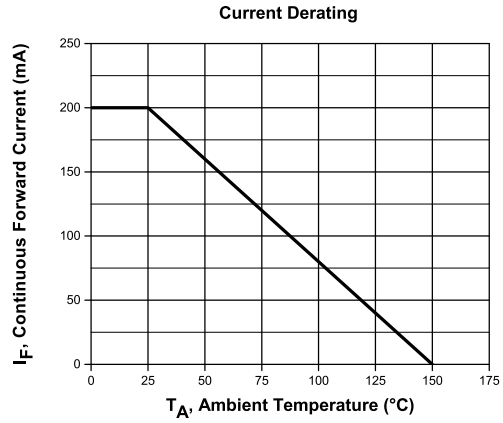
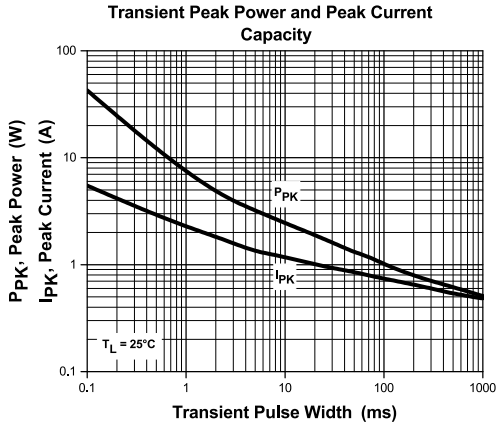
R6 (16-February 2016)

CMLSH-4DO

SURFACE MOUNT SILICON  
DUAL, ISOLATED OPPOSING  
SCHOTTKY DIODE



### TYPICAL ELECTRICAL CHARACTERISTICS



R6 (16-February 2016)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



---

### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

---

### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

---

### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

---

### CONTACT US

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.  
145 Adams Avenue  
Hauppauge, NY 11788 USA  
Main Tel: (631) 435-1110  
Main Fax: (631) 435-1824  
Support Team Fax: (631) 435-3388  
[www.centrasemi.com](http://www.centrasemi.com)

**Worldwide Field Representatives:**  
[www.centrasemi.com/wwreps](http://www.centrasemi.com/wwreps)

**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.com/wwdistributors)

---

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: [www.centrasemi.com/terms](http://www.centrasemi.com/terms)