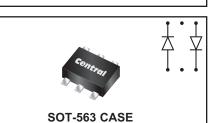
#### CMLSH-4DO

### SURFACE MOUNT SILICON DUAL, ISOLATED OPPOSING SCHOTTKY DIODE





www.centralsemi.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** 

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Continuous Forward Current	I <sub>F</sub>	200	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	350	mA
Peak Forward Surge Current, tp=10ms	I <sub>FSM</sub>	750	mA
Power Dissipation	$P_{D}$	250	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	500	°C/W

# **ELECTRICAL CHARACTERISTICS PER DIODE:** (TA=25°C unless otherwise noted)

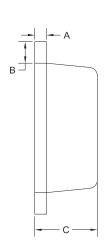
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> =25V		90	500	nA
$I_{R}$	V <sub>R</sub> =25V, T <sub>A</sub> =100°C		25	100	μΑ
$BV_R$	I <sub>R</sub> =100μA	40	50		V
$V_{F}$	I <sub>F</sub> =2.0mA		0.29	0.33	V
VF	I <sub>F</sub> =15mA		0.37	0.42	V
VF	I <sub>F</sub> =100mA		0.61	0.80	V
$V_{F}$	I <sub>F</sub> =200mA		0.65	1.0	V
CJ	V <sub>R</sub> =1.0V, f=1.0MHz		7.0		pF
t <sub>rr</sub>	$I_F = I_R = 10 \text{mA}, I_{rr} = 1.0 \text{mA}, R_L = 100 \Omega$			5.0	ns

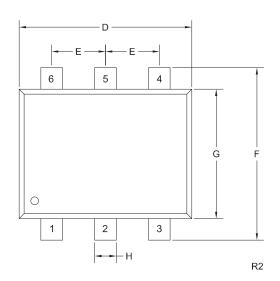
### CMLSH-4DO

## SURFACE MOUNT SILICON **DUAL, ISOLATED OPPOSING SCHOTTKY DIODE**

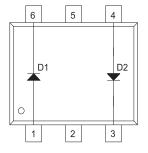


# **SOT-563 CASE - MECHANICAL OUTLINE**





#### **PIN CONFIGURATION**



DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.0027	0.007	0.07	0.18			
В	0.008		0.20				
С	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			
Н	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

R5 (1-July 2015)

#### CMLSH-4DO





#### **SERVICES**

- · Bonded Inventory
- · Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/Multi Discrete Modules (MDM™)
- · Bare Die Available for Hybrid Applications

**LIMITATIONS AND DAMAGES DISCLAIMER:** In no event shall Central be liable for any collateral, indirect, punitive, incidental, consequential, or exemplary damages in connection with or arising out of a purchase order or contract or the use of products provided hereunder, regardless of whether Central has been advised of the possibility of such damages. Excluded damages shall include, but not be restricted to: cost of removal or reinstallation, rework, ancillary costs to the procurement of substitute products, loss of profits, loss of savings, loss of use, loss of data, or business interruption. No claim, suit, or action shall be brought against Central more than two (2) years after the related cause of action has occurred.

In no event shall Central's aggregate liability from any warranty, indemnity, or other obligation arising out of or in connection with a purchase order or contract, or any use of any Central product provided hereunder, exceed the total amount paid to Central for the specific products sold under a purchase order or contract with respect to which losses or damages are claimed. The existence of more than one (1) claim against the specific products sold to Buyer under a purchase order or contract shall not enlarge or extend this limit.

Buyer understands and agrees that the foregoing liability limitations are essential elements of a purchase order or contract and that in the absence of such limitations, the material and economic terms of the purchase order or contract would be substantially different.

R5 (1-July 2015)