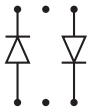
**CMLSH-4DO**

**SURFACE MOUNT**
**DUAL ISOLATED**
**OPPOSING SILICON**
**SCHOTTKY DIODES**

PICOmini™



**SOT-563 CASE**

Central Semiconductor Corp.

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 PICOmini™ device has been designed for applications requiring fast switching speeds and a low forward voltage drop.

**MARKING CODE: L4O**

| **MAXIMUM RATINGS:** ($T_A$=25°C) | **SYMBOL** | | **UNITS** |
|---|---|---|---|
| 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, tp=10ms | $I_{FSM}$ | 750 | mA |
| Power Dissipation | $P_D$ | 250 | mW |
| Operating and Storage Junction Temperature | $T_J$, $T_{stg}$ | -65 to +150 | °C |
| Thermal Resistance | $\Theta_{JA}$ | 500 | °C/W |

**ELECTRICAL CHARACTERISTICS PER DIODE:** ($T_A$=25°C unless otherwise noted)

| **SYMBOL** | **TEST CONDITIONS** | **MIN** | **TYP** | **MAX** | **UNITS** |
|---|---|---|---|---|---|
| $I_R$ | $V_R$=25V | | 90 | 500 | nA |
| $I_R$ | $V_R$=25V, $T_A$=100°C | | 25 | 100 | μA |
| $BV_R$ | $I_R$=100μA | 40 | 50 | | V |
| $V_F$ | $I_F$=2.0mA | | 0.29 | 0.33 | V |
| $V_F$ | $I_F$=15mA | | 0.37 | 0.42 | V |
| $V_F$ | $I_F$=100mA | | 0.61 | 0.80 | V |
| $V_F$ | $I_F$=200mA | | 0.65 | 1.0 | V |
| $C_T$ | $V_R$=1.0V, f=1.0MHz | | 7.0 | | pF |
| $t_{rr}$ | $I_F$=$I_R$=10mA, $I_{rr}$=1.0mA, $R_L$=100Ω | | | 5.0 | ns |

**CMLSH-4DO**

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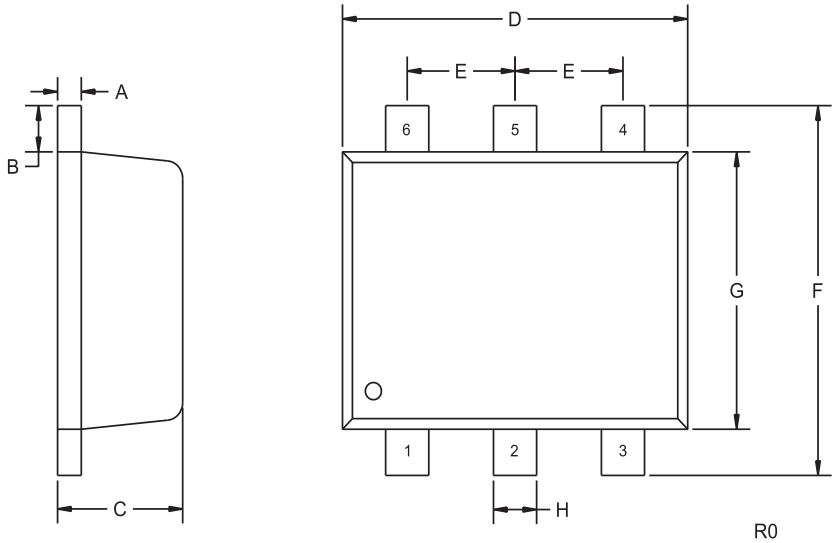
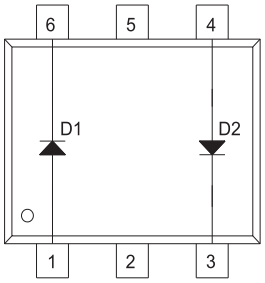
## SOT-563 CASE - MECHANICAL OUTLINE




R0

**PIN CONFIGURATION**




| DIMENSIONS | | | | |
|---|---|---|---|---|
| | INCHES | | MILLIMETERS | |
| SYMBOL | 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) Cathode D2
4) Anode D2
5) NC
6) Cathode D1

**MARKING CODE: L4O**

R3 (20-January 2010)