

**CMKSH-3DO**  
**SURFACE MOUNT**  
**DUAL OPPOSING SILICON**  
**SCHOTTKY DIODES**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMKSH-3DO incorporates two (2) galvanically isolated, Low  $V_F$  Silicon Diodes with an opposing Anode/Cathode configuration, in a space saving surface mount package, designed for fast switching applications requiring a low forward voltage drop.

**MARKING CODE: KDO**



**FEATURES:**

- Dual Opposing (DO) Schottky Diodes
- Small ULTRAmimi™ SOT-363 Package
- Galvanically Isolated
- Low Forward Voltage (0.58V TYP @ 100mA)

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

|  |                |             |                    |
|--|----------------|-------------|--------------------|
| Peak Repetitive Reverse Voltage            | $V_{RRM}$      | 30          | V                  |
| Continuous Forward Current                 | $I_F$          | 100         | 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         |             | UNITS              |
|----------------|-------------|--------------------|
| $V_{RRM}$      | 30          | V                  |
| $I_F$          | 100         | mA                 |
| $P_D$          | 250         | mW                 |
| $T_J, T_{stg}$ | -65 to +150 | $^\circ\text{C}$   |
| $\theta_{JA}$  | 500         | $^\circ\text{C/W}$ |

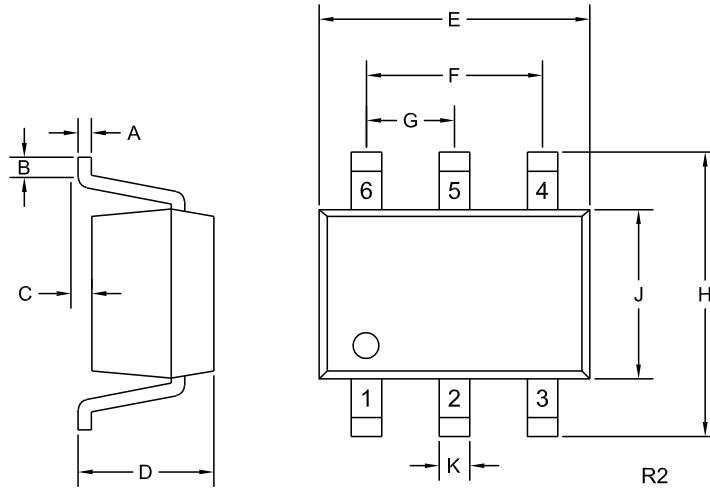
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

| SYMBOL   | TEST CONDITIONS   | MIN | TYP  | MAX  | UNITS         |
|----------|---|-----|------|------|---------------|
| $I_R$    | $V_R=25\text{V}$  |     |      | 500  | nA            |
| $I_R$    | $V_R=25\text{V}, T_A=100^\circ\text{C}$                   |     |      | 100  | $\mu\text{A}$ |
| $BV_R$   | $I_R=100\mu\text{A}$                                      | 30  |      |      | V             |
| $V_F$    | $I_F=2.0\text{mA}$  |     |      | 0.33 | V             |
| $V_F$    | $I_F=15\text{mA}$   |     |      | 0.45 | V             |
| $V_F$    | $I_F=100\text{mA}$  |     | 0.58 | 1.00 | V             |
| $C_T$    | $V_R=0, f=1.0\text{MHz}$                                  |     | 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            |

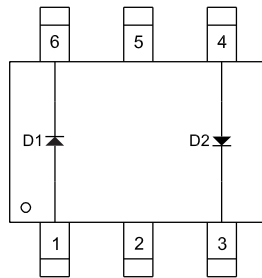
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**SOT-363 CASE - MECHANICAL OUTLINE**



**PIN CONFIGURATION**



**LEAD CODE:**

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

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| SYMBOL | INCHES |       | MILLIMETERS |      |
|--------|--------|-------|-------------|------|
|        | MIN    | MAX   | MIN         | MAX  |
| A      | 0.004  | 0.010 | 0.10        | 0.25 |
| B      | 0.005  | -     | 0.12        | -    |
| C      | 0.000  | 0.004 | 0.00        | 0.10 |
| D      | 0.031  | 0.043 | 0.80        | 1.10 |
| E      | 0.071  | 0.087 | 1.80        | 2.20 |
| F      | 0.051  |       | 1.30        |      |
| G      | 0.026  |       | 0.65        |      |
| H      | 0.075  | 0.091 | 1.90        | 2.30 |
| J      | 0.043  | 0.055 | 1.10        | 1.40 |
| K      | 0.006  | 0.012 | 0.15        | 0.30 |

SOT-363 (REV: R2)

R4 (13-January 2010)