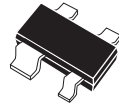


**CMFSH-3i**  
**DUAL ISOLATED  
SCHOTTKY DIODE**



**SOT-143 CASE**

# Central<sup>TM</sup>

**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMFSH-3i type is a Silicon Dual Isolated Schottky diode designed for surface mount fast switching applications requiring a low forward voltage drop.

**MARKING CODE: C3I**

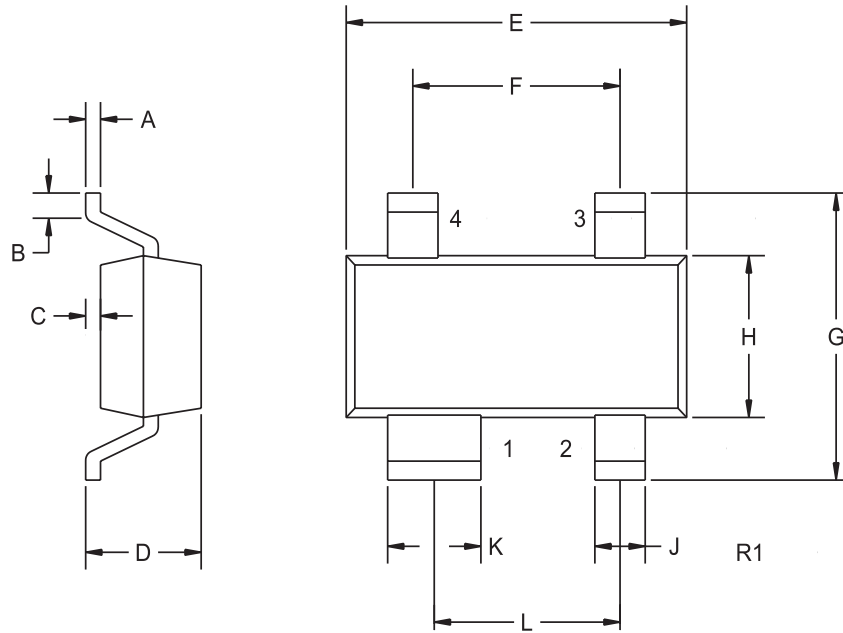
**MAXIMUM RATINGS:** ( $T_A=25\text{ }^\circ\text{C}$ )

|  | <b>SYMBOL</b>  |             | <b>UNITS</b>       |
|--|----------------|-------------|--------------------|
| Peak Repetitive Reverse Voltage          | $V_{RRM}$      | 30          | V                  |
| Continuous Forward Current               | $I_F$          | 100         | mA                 |
| Peak Repetitive Forward Current          | $I_{FRM}$      | 350         | mA                 |
| Forward Surge Current, $t_p=10\text{ms}$ | $I_{FSM}$      | 750         | mA                 |
| Power Dissipation                        | $P_D$          | 350         | mW                 |
| Operating and Storage                    |                |             |                    |
| Junction Temperature                     | $T_J, T_{stg}$ | -65 to +150 | $^\circ\text{C}$   |
| Thermal Resistance                       | $\theta_{JA}$  | 357         | $^\circ\text{C/W}$ |

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

| <b>SYMBOL</b> | <b>TEST CONDITIONS</b>                                    | <b>MIN</b> | <b>TYP</b> | <b>MAX</b> | <b>UNITS</b>  |
|---------------|---|------------|------------|------------|---------------|
| $I_R$         | $V_R=25\text{V}$  |            | 90         | 500        | nA            |
| $I_R$         | $V_R=25\text{V}, T_A=100\text{ }^\circ\text{C}$           |            | 25         | 100        | $\mu\text{A}$ |
| $BV_R$        | $I_R=100\mu\text{A}$                                      | 30         |            |            | V             |
| $V_F$         | $I_F=2.0\text{mA}$  |            | 0.29       | 0.33       | V             |
| $V_F$         | $I_F=15\text{mA}$   |            | 0.40       | 0.45       | V             |
| $V_F$         | $I_F=100\text{mA}$  |            | 0.74       | 1.00       | V             |
| $C_T$         | $V_R=1.0\text{V}, f=1.0\text{MHz}$                        |            | 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            |

SOT-143 CASE - MECHANICAL OUTLINE



**LEAD CODE:**

- 1) CATHODE 1
- 2) CATHODE 2
- 3) ANODE 2
- 4) ANODE 1

**MARKING CODE: C3I**

| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | INCHES     |       | MILLIMETERS |      |
|        | MIN        | MAX   | MIN         | MAX  |
| A      | 0.004      | 0.005 | 0.10        | 0.13 |
| B      | 0.006      | -     | 0.15        | -    |
| C      | 0.003      | 0.005 | 0.08        | 0.13 |
| D      | 0.037      | 0.043 | 0.94        | 1.09 |
| E      | 0.110      | 0.118 | 2.79        | 3.00 |
| F      | 0.079      |       | 2.01        |      |
| G      | -          | 0.098 | -           | 2.49 |
| H      | 0.047      | 0.051 | 1.19        | 1.30 |
| J      | 0.014      | 0.018 | 0.36        | 0.46 |
| K      | 0.030      | 0.033 | 0.76        | 0.84 |
| L      | 0.071      |       | 1.80        |      |

SOT-143 (REV: R1)