

**CSHD6-100C**

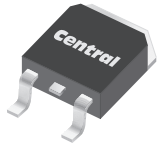
**SURFACE MOUNT SILICON  
DUAL, COMMON CATHODE  
HIGH VOLTAGE  
SCHOTTKY RECTIFIER  
6.0 AMP, 100 VOLT**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSHD6-100C is a silicon Schottky rectifier designed for high voltage applications requiring a low forward voltage drop.

**DPAK CASE****MARKING: FULL PART NUMBER****MAXIMUM RATINGS:** ( $T_C=25^\circ\text{C}$  unless otherwise noted)

|   | <b>SYMBOL</b>  |             | <b>UNITS</b>              |
|---|----------------|-------------|---------------------------|
| Peak Repetitive Reverse Voltage                               | $V_{RRM}$      | 100         | V                         |
| Average Rectified Forward Current ( $T_C=120^\circ\text{C}$ ) | $I_O$          | 6.0         | A                         |
| Peak Forward Surge Current, $t_p=10\text{ms}$                 | $I_{FSM}$      | 50          | A                         |
| Peak Repetitive Reverse Surge Current, $t_p=2.0\mu\text{s}$   | $I_{RRM}$      | 1.0         | A                         |
| Critical Rate of Rise of Reverse Voltage                      | $dv/dt$        | 10,000      | V/ $\mu\text{s}$          |
| Operating and Storage Junction Temperature                    | $T_J, T_{stg}$ | -65 to +150 | $^\circ\text{C}$          |
| Thermal Resistance  | $\theta_{JC}$  | 3.5         | $^\circ\text{C}/\text{W}$ |

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

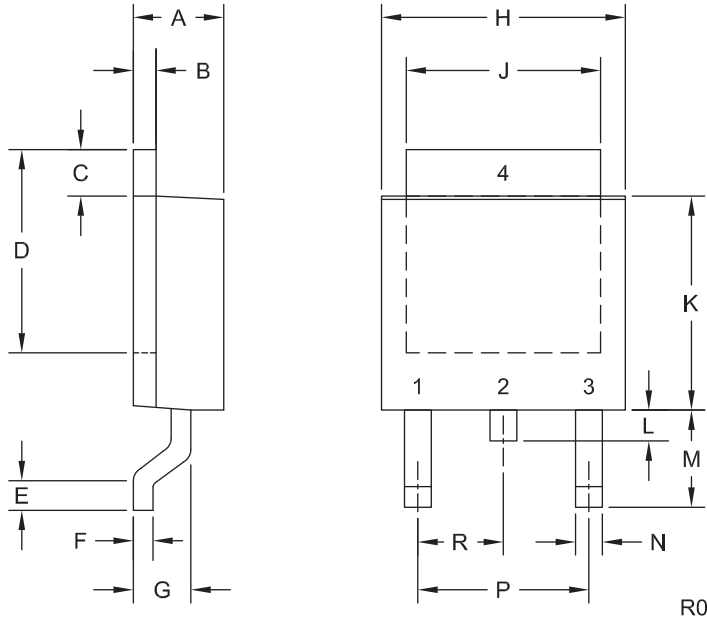
| <b>SYMBOL</b> | <b>TEST CONDITIONS</b>                   | <b>MAX</b> | <b>UNITS</b>  |
|---------------|--|------------|---------------|
| $I_R$         | $V_R=100\text{V}$                        | 30         | $\mu\text{A}$ |
| $I_R$         | $V_R=100\text{V}, T_C=125^\circ\text{C}$ | 10         | mA            |
| $V_F$         | $I_F=3.0\text{A}$                        | 0.75       | V             |
| $V_F$         | $I_F=3.0\text{A}, T_C=125^\circ\text{C}$ | 0.70       | V             |
| $V_F$         | $I_F=6.0\text{A}$                        | 1.10       | V             |
| $V_F$         | $I_F=6.0\text{A}, T_C=125^\circ\text{C}$ | 1.05       | V             |

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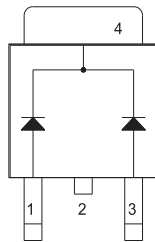
**DPAK CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) Anode 1
  - 2) Cathode
  - 3) Anode 2
  - 4) Cathode
- Pin 2 is common to the tab (4)

**MARKING: FULL PART NUMBER**



| DIMENSIONS |        |       |             |      |
|------------|--------|-------|-------------|------|
| SYMBOL     | INCHES |       | MILLIMETERS |      |
|            | MIN    | MAX   | MIN         | MAX  |
| A          | 0.083  | 0.108 | 2.10        | 2.75 |
| B          | 0.016  | 0.032 | 0.40        | 0.81 |
| C          | 0.035  | 0.063 | 0.89        | 1.60 |
| D          | 0.203  | 0.228 | 5.15        | 5.79 |
| E          | 0.020  | -     | 0.51        | -    |
| F          | 0.018  | 0.024 | 0.45        | 0.60 |
| G          | 0.051  | 0.071 | 1.30        | 1.80 |
| H          | 0.248  | 0.268 | 6.30        | 6.81 |
| J          | 0.197  | 0.217 | 5.00        | 5.50 |
| K          | 0.209  | 0.245 | 5.30        | 6.22 |
| L          | 0.025  | 0.040 | 0.64        | 1.02 |
| M          | 0.090  | 0.115 | 2.30        | 2.91 |
| N          | 0.012  | 0.045 | 0.30        | 1.14 |
| P          | 0.180  |       | 4.60        |      |
| R          | 0.090  |       | 2.30        |      |

DPAK (REV: R0)

R6 (21-January 2013)