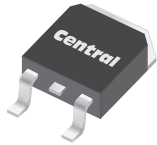


**CSHD12-60C**

**SURFACE MOUNT SILICON  
DUAL, COMMON CATHODE  
SCHOTTKY RECTIFIER  
12 AMP, 60 VOLT**

**DPAK CASE**[www.centrasemi.com](http://www.centrasemi.com)**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSHD12-60C is a silicon Schottky rectifier designed for applications requiring a low forward voltage drop. This device is manufactured with two 6.0 Amp Schottky rectifiers assembled in a common cathode configuration.

**MARKING: FULL PART NUMBER****APPLICATIONS:**

- DC-DC output rectification
- Reverse polarity protection
- Voltage clamping

**FEATURES:**

- Low forward voltage
- High surge capability
- High current density
- Low reverse leakage loss

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

|                                                                | SYMBOL         |             | UNITS                |
|----------------------------------------------------------------|----------------|-------------|----------------------|
| Peak Repetitive Reverse Voltage                                | $V_{RRM}$      | 60          | V                    |
| DC Blocking Voltage                                            | $V_R$          | 60          | V                    |
| Average Rectified Forward Current ( $T_C=75^{\circ}\text{C}$ ) | $I_O$          | 12          | A                    |
| Peak Forward Surge Current, $t_p=8.3\text{ms}$                 | $I_{FSM}$      | 100         | A                    |
| Operating and Storage Junction Temperature                     | $T_J, T_{stg}$ | -65 to +150 | $^{\circ}\text{C}$   |
| Thermal Resistance                                             | $\theta_{JC}$  | 3.0         | $^{\circ}\text{C/W}$ |

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

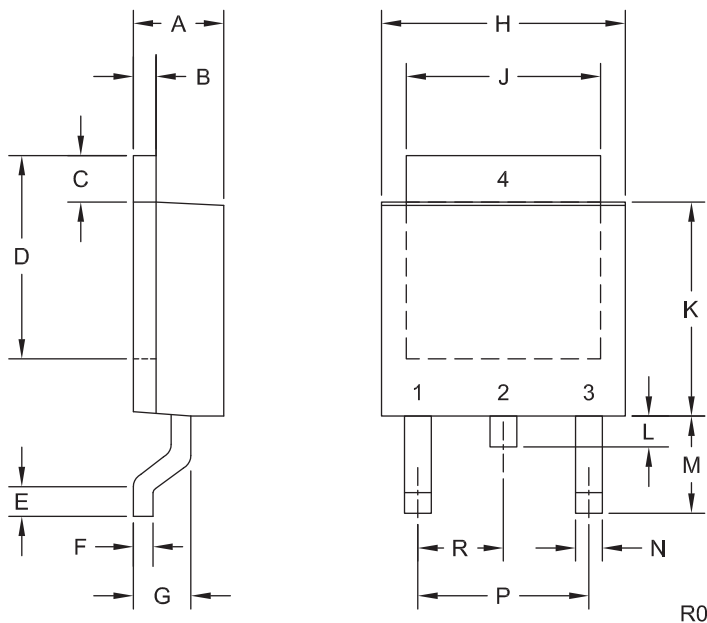
| SYMBOL   | TEST CONDITIONS                                         | TYP  | MAX  | UNITS         |
|----------|---------------------------------------------------------|------|------|---------------|
| $I_R$    | $V_R=60\text{V}$                                        | 2.0  | 50   | $\mu\text{A}$ |
| $I_R$    | $V_R=60\text{V}, T_J=100^{\circ}\text{C}$               |      | 20   | mA            |
| $V_F$    | $I_F=6.0\text{A}$                                       | 0.72 | 0.75 | V             |
| $t_{rr}$ | $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ | 15   |      | ns            |

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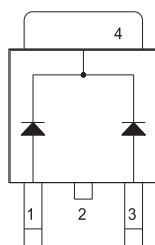
DPAK CASE - MECHANICAL OUTLINE



LEAD CODE:

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

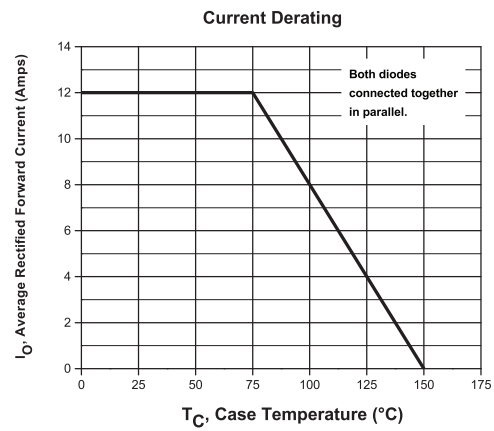
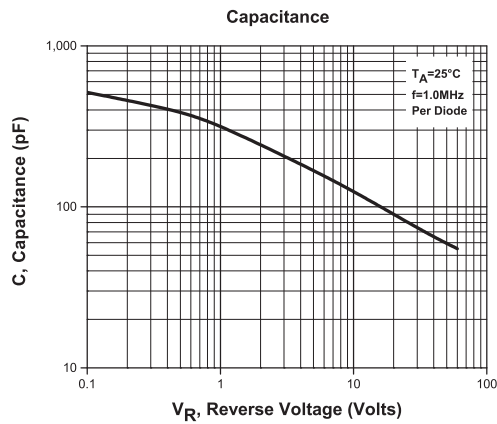
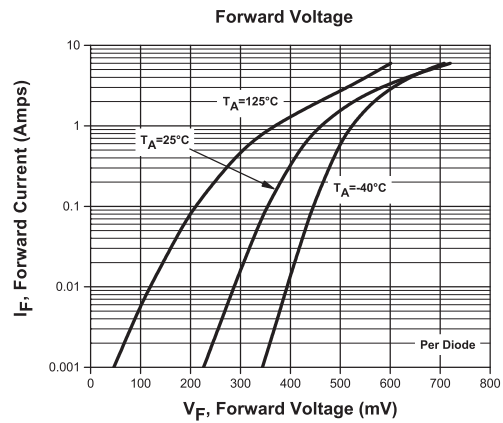
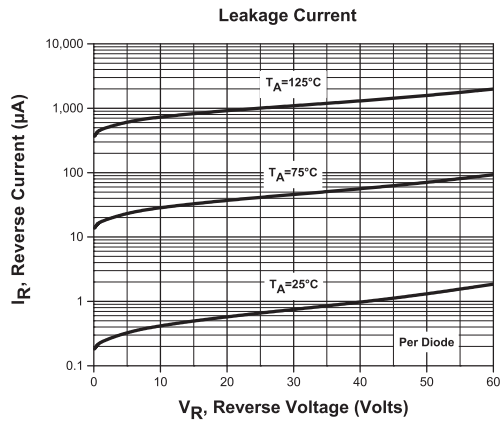
R3 (21-February 2013)

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## TYPICAL ELECTRICAL CHARACTERISTICS



R3 (21-February 2013)