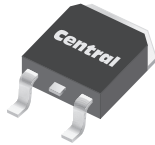


CSHD5-40  
CSHD5-60  
CSHD5-100

**SURFACE MOUNT SILICON  
SCHOTTKY RECTIFIERS  
5.0 AMP, 40 THRU 100 VOLT**



**DPAK CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSHD5-40, CSHD5-60 and CSHD5-100 are 5.0 Amp high quality, highly reliable silicon Schottky Rectifiers designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

**MARKING: FULL PART NUMBER**

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

|  | SYMBOL         | CSHD5-40 | CSHD5-60    | CSHD5-100 | UNITS              |
|--|----------------|----------|-------------|-----------|--------------------|
| Peak Repetitive Reverse Voltage                    | $V_{RRM}$      | 40       | 60          | 100       | V                  |
| DC Blocking Voltage                                | $V_R$          | 40       | 60          | 100       | V                  |
| RMS Reverse Voltage                                | $V_{R(RMS)}$   | 28       | 42          | 71        | V                  |
| Average Forward Current ( $T_L=75^\circ\text{C}$ ) | $I_O$          |          | 5.0         |           | 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                                 | $\theta_{JL}$  |          | 5.0         |           | $^\circ\text{C/W}$ |

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

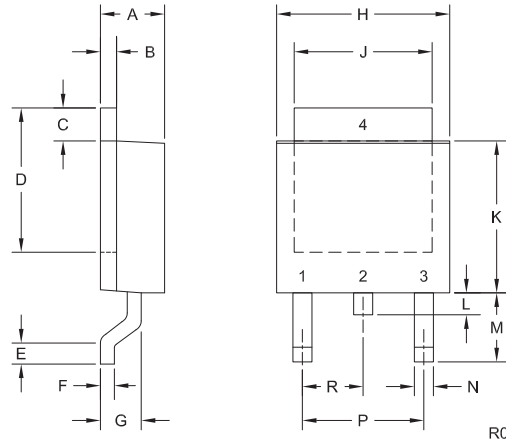
| SYMBOL | TEST CONDITIONS                                    | TYP | MAX  | UNITS |
|--------|--|-----|------|-------|
| $I_R$  | $V_R=\text{Rated } V_{RRM}$                        |     | 0.2  | mA    |
| $I_R$  | $V_R=\text{Rated } V_{RRM}, T_L=100^\circ\text{C}$ |     | 20   | mA    |
| $V_F$  | $I_F=5.0\text{A (CSHD5-40)}$                       |     | 0.55 | V     |
| $V_F$  | $I_F=5.0\text{A (CSHD5-60)}$                       |     | 0.75 | V     |
| $V_F$  | $I_F=5.0\text{A (CSHD5-100)}$                      |     | 0.85 | V     |
| $C_J$  | $V_R=4.0\text{V}, f=1.0\text{MHz (CSHD5-40)}$      | 225 |      | pF    |
| $C_J$  | $V_R=4.0\text{V}, f=1.0\text{MHz (CSHD5-60)}$      | 185 |      | pF    |
| $C_J$  | $V_R=4.0\text{V}, f=1.0\text{MHz (CSHD5-100)}$     | 145 |      | pF    |

CSHD5-40  
CSHD5-60  
CSHD5-100



**SURFACE MOUNT SILICON  
SCHOTTKY RECTIFIERS  
5.0 AMP, 40 THRU 100 VOLT**

**DPAK CASE - MECHANICAL OUTLINE**



| 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        |      |

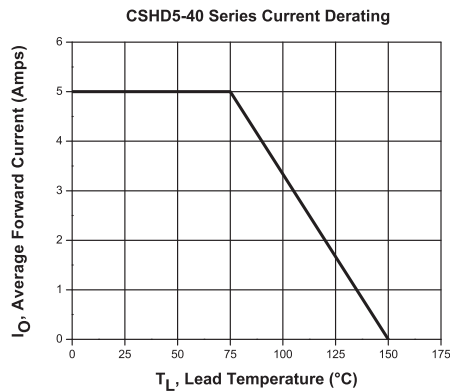
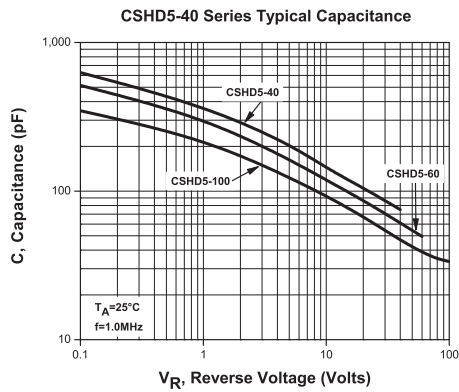
DPAK (REV: R0)

**LEAD CODE:**

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

**MARKING: FULL PART NUMBER**

**TYPICAL ELECTRICAL CHARACTERISTICS**



R3 (21-January 2013)

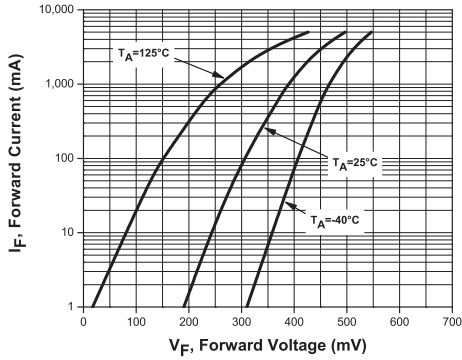
CSHD5-40  
 CSHD5-60  
 CSHD5-100



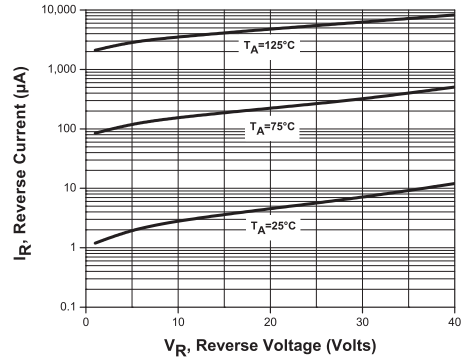
**SURFACE MOUNT SILICON  
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**TYPICAL ELECTRICAL CHARACTERISTICS**

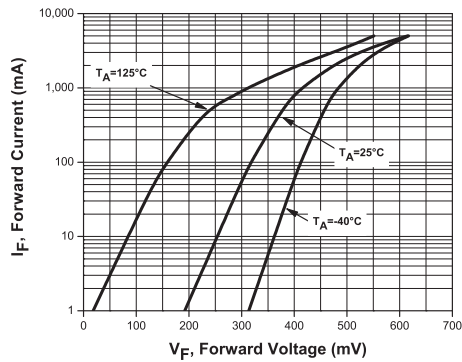
CSHD5-40 Typical Forward Voltage



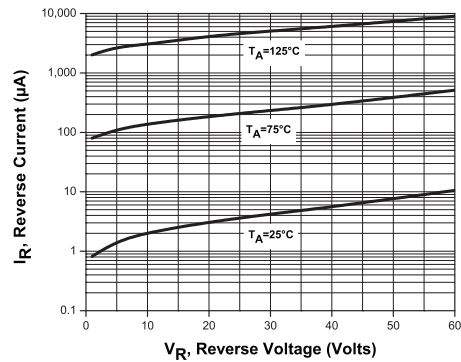
CSHD5-40 Typical Leakage Current



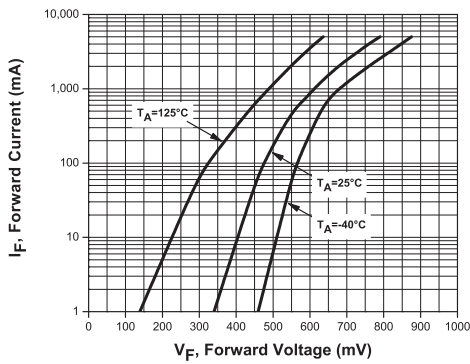
CSHD5-60 Typical Forward Voltage



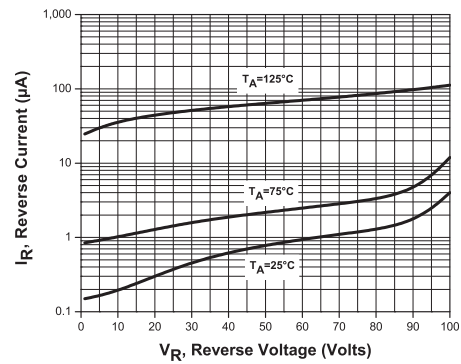
CSHD5-60 Typical Leakage Current



CSHD5-100 Typical Forward Voltage



CSHD5-100 Typical Leakage Current



R3 (21-January 2013)