

CSHD3-40

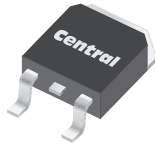
**SURFACE MOUNT SILICON  
SCHOTTKY RECTIFIER  
3.0 AMP, 40 VOLT**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSHD3-40 is a high quality, highly reliable silicon Schottky rectifier designed for use in all types of commercial, industrial, entertainment, computer and automotive applications.



**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                               | $V_{RRM}$      | 40          | V                  |
| Average Rectified Forward Current ( $T_C=120^\circ\text{C}$ ) | $I_O$          | 3.0         | A                  |
| Peak Forward Surge Current, $t_p=10\text{ms}$                 | $I_{FSM}$      | 75          | 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  | $\theta_{JC}$  | 5.5         | $^\circ\text{C/W}$ |

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

| <b>SYMBOL</b> | <b>TEST CONDITIONS</b>                   | <b>MAX</b> | <b>UNITS</b>  |
|---------------|--|------------|---------------|
| $I_R$         | $V_R=40\text{V}$                         | 100        | $\mu\text{A}$ |
| $I_R$         | $V_R=40\text{V}, T_C=125^\circ\text{C}$  | 10         | mA            |
| $V_F$         | $I_F=3.0\text{A}$                        | 0.65       | V             |
| $V_F$         | $I_F=3.0\text{A}, T_C=125^\circ\text{C}$ | 0.60       | V             |

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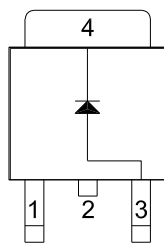
**DPAK CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) No Connection
  - 2) Cathode
  - 3) Anode
  - 4) Cathode
- Pin 2 is common to the tab (4)

**MARKING: FULL PART NUMBER**



| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | 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)

R9 (21-January 2013)