

## CMDSH-3

### SUPER-MINI SCHOTTKY DIODE

**SUPER<sup>TM</sup>**  
**mini**



**SOD-323 CASE**

### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMDSH-3 type is a Silicon Schottky Diode, manufactured in a super-mini surface mount package, designed for fast switching applications requiring a low forward voltage drop.

**Marking Code is S1.**

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

|                                    | SYMBOL         |             | UNITS                       |
|------------------------------------|----------------|-------------|-----------------------------|
| Peak Repetitive Reverse Voltage    | $V_{RRM}$      | 30          | V                           |
| Average Forward Current            | $I_O$          | 100         | mA                          |
| Forward Surge Current, $t_p=10$ ms | $I_{FSM}$      | 750         | mA                          |
| Power Dissipation                  | $P_D$          | 250         | mW                          |
| Operating and Storage              |                |             |                             |
| Junction Temperature               | $T_J, T_{stg}$ | -65 to +150 | $^{\circ}\text{C}$          |
| Thermal Resistance                 | $\Theta_{JA}$  | 500         | $^{\circ}\text{C}/\text{W}$ |

### ELECTRICAL CHARACTERISTICS: ( $T_A=25^{\circ}\text{C}$ )

| SYMBOL   | TEST CONDITIONS             | MIN | TYP  | MAX  | UNITS         |
|----------|-----------------------------|-----|------|------|---------------|
| $B_{VR}$ | $I_F=100\mu\text{A}$        | 30  |      |      | V             |
| $V_F$    | $I_F=2.0\text{mA}$          |     | 0.30 |      | V             |
| $V_F$    | $I_F=15\text{mA}$           |     | 0.36 |      | V             |
| $V_F$    | $I_F=50\text{mA}$           |     | 0.47 | 0.55 | V             |
| $V_F$    | $I_F=100\text{mA}$          |     | 0.58 | 0.80 | V             |
| $I_R$    | $V_R=25\text{V}$            |     |      | 1.0  | $\mu\text{A}$ |
| $C_T$    | $V_R=10\text{V}, f=1.0$ MHz |     | 7.0  |      | pF            |

All dimensions in inches (mm).

