

**CMDSH2-3**

**SURFACE MOUNT SILICON  
HIGH CURRENT SCHOTTKY DIODE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMDSH2-3 is a silicon Schottky diode, manufactured in a SOD-323 surface mount package, designed for applications requiring a low forward voltage drop.

**MARKING CODE: S2**

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

Peak Repetitive Reverse Voltage  
 Continuous Forward Current  
 Peak Forward Surge Current,  $t_p=10\text{ms}$   
 Power Dissipation  
 Operating and Storage Junction Temperature  
 Thermal Resistance

| SYMBOL         |             | UNITS              |
|----------------|-------------|--------------------|
| $V_{RRM}$      | 30          | V                  |
| $I_F$          | 200         | mA                 |
| $I_{FSM}$      | 1.0         | A                  |
| $P_D$          | 250         | mW                 |
| $T_J, T_{stg}$ | -65 to +150 | $^\circ\text{C}$   |
| $\theta_{JA}$  | 500         | $^\circ\text{C/W}$ |

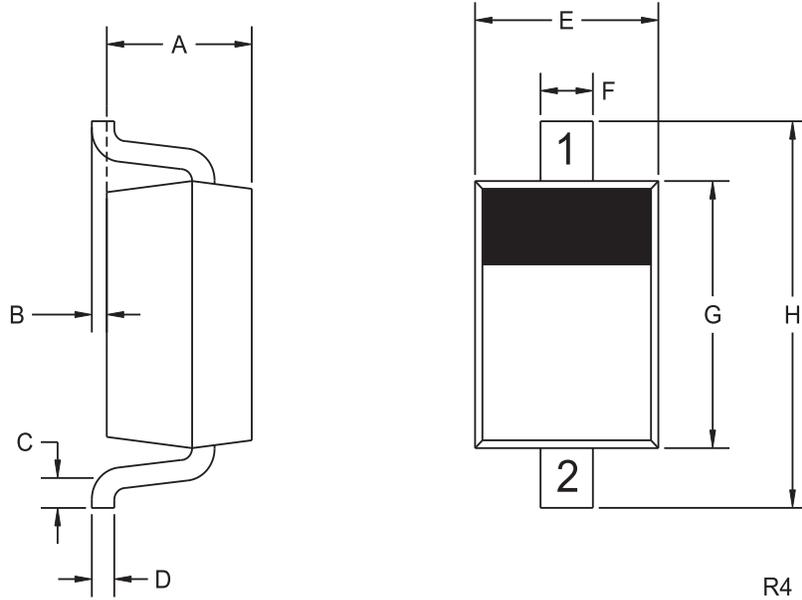
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$ )

| SYMBOL | TEST CONDITIONS                   | MIN | TYP   | MAX  | UNITS         |
|--------|-----------------------------------|-----|-------|------|---------------|
| $I_R$  | $V_R=30\text{V}$                  |     | 19    | 50   | $\mu\text{A}$ |
| $BV_R$ | $I_R=100\mu\text{A}$              | 30  |       |      | V             |
| $V_F$  | $I_F=2.0\text{mA}$                |     | 0.186 |      | V             |
| $V_F$  | $I_F=15\text{mA}$                 |     | 0.245 |      | V             |
| $V_F$  | $I_F=100\text{mA}$                |     | 0.35  |      | V             |
| $V_F$  | $I_F=200\text{mA}$                |     | 0.42  | 0.55 | V             |
| $C_J$  | $V_R=10\text{V}, f=1.0\text{MHz}$ |     | 6.0   |      | pF            |

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**SOD-323 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) Cathode
- 2) Anode

**MARKING CODE: S2**

| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | INCHES     |       | MILLIMETERS |      |
|        | MIN        | MAX   | MIN         | MAX  |
| A      | 0.031      | 0.039 | 0.80        | 1.00 |
| B      | 0.000      | 0.004 | 0.00        | 0.10 |
| C      | 0.008      | -     | 0.20        | -    |
| D      | 0.004      | 0.007 | 0.11        | 0.19 |
| E      | 0.045      | 0.053 | 1.15        | 1.35 |
| F      | -          | 0.014 | -           | 0.35 |
| G      | 0.063      | 0.071 | 1.60        | 1.80 |
| H      | 0.094      | 0.102 | 2.40        | 2.60 |

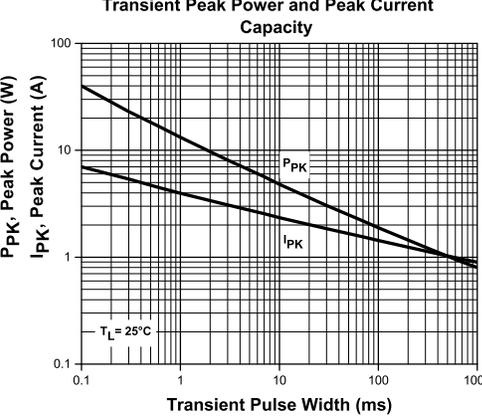
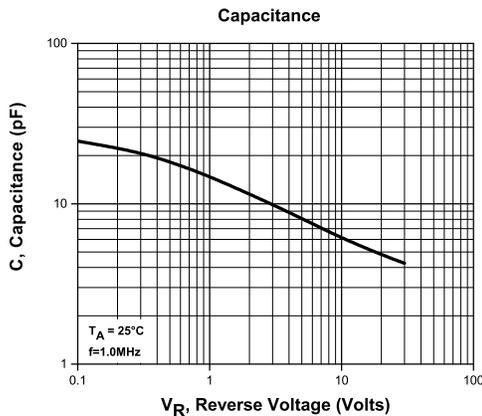
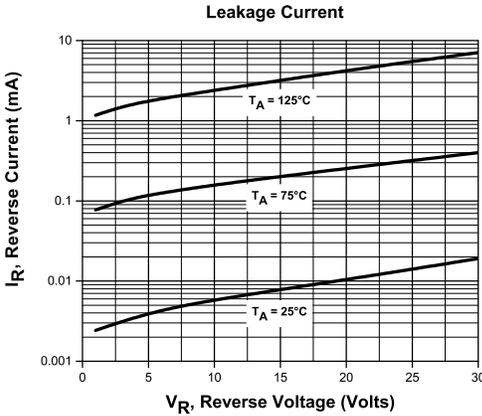
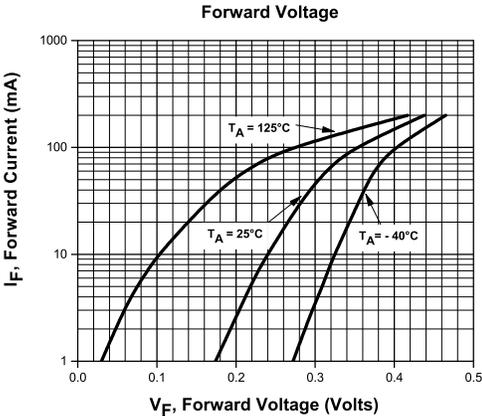
SOD-323 (REV: R4)

R4 (13-November 2015)

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**TYPICAL ELECTRICAL CHARACTERISTICS**

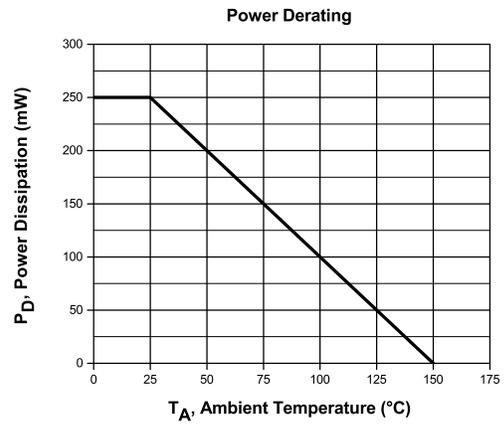
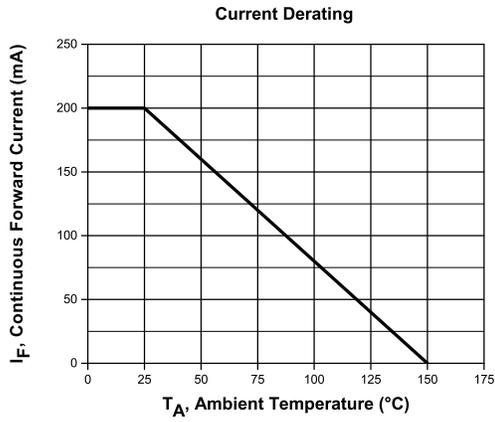


R4 (13-November 2015)

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**TYPICAL ELECTRICAL CHARACTERISTICS**



R4 (13-November 2015)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### CONTACT US

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