

**CMOSH2-4L**

**SURFACE MOUNT SILICON  
HIGH CURRENT  
LOW  $V_F$  SCHOTTKY DIODE**

**SOD-523 CASE**[www.centrasemi.com](http://www.centrasemi.com)**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMOSH2-4L is a high current, low  $V_F$  silicon Schottky diode in an SOD-523 surface mount package. This device offers a  $V_F$  as low as 0.33 volts and is designed for small signal general purpose applications where size and low loss is required.

**MARKING CODE: 4L****MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

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

**SYMBOL**

$V_{RRM}$  40  
 $I_F$  200  
 $I_{FRM}$  350  
 $I_{FSM}$  1.0  
 $P_D$  250  
 $T_J, T_{stg}$  -65 to +150  
 $\theta_{JA}$  500

**UNITS**

V  
mA  
mA  
A  
mW  
 $^\circ\text{C}$   
 $^\circ\text{C/W}$

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

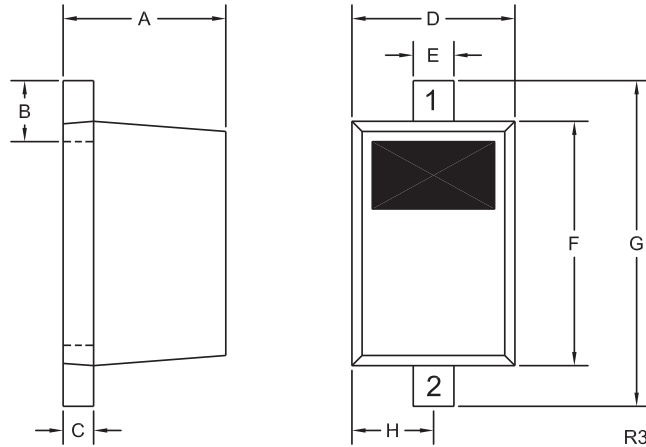
| SYMBOL   | TEST CONDITIONS   | MIN | TYP  | MAX   | UNITS         |
|----------|---|-----|------|-------|---------------|
| $I_R$    | $V_R=20\text{V}$  |     | 11   | 50    | $\mu\text{A}$ |
| $BV_R$   | $I_R=100\mu\text{A}$                                      | 40  | 53   |       | V             |
| $V_F$    | $I_F=10\text{mA}$   |     | 0.24 | 0.325 | V             |
| $V_F$    | $I_F=100\text{mA}$  |     | 0.35 | 0.4   | V             |
| $V_F$    | $I_F=200\text{mA}$  |     | 0.42 | 0.5   | V             |
| $C_J$    | $V_R=4.0\text{V}, f=1.0\text{MHz}$                        |     | 8.5  | 10    | pF            |
| $t_{rr}$ | $I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$ |     | 4.0  | 5.0   | ns            |

CMOSH2-4L

SURFACE MOUNT SILICON  
HIGH CURRENT  
LOW  $V_F$  SCHOTTKY DIODE



SOD-523 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: 4L

| DIMENSIONS |        |       |             |      |
|------------|--------|-------|-------------|------|
| SYMBOL     | INCHES |       | MILLIMETERS |      |
|            | MIN    | MAX   | MIN         | MAX  |
| A          | 0.020  | 0.031 | 0.50        | 0.80 |
| B          | 0.008  | 0.016 | 0.20        | 0.40 |
| C          | 0.002  | 0.008 | 0.05        | 0.20 |
| D          | 0.028  | 0.035 | 0.70        | 0.90 |
| E          | 0.008  | 0.014 | 0.20        | 0.35 |
| F          | 0.039  | 0.055 | 1.00        | 1.40 |
| G          | 0.055  | 0.071 | 1.40        | 1.80 |
| H          | 0.016  |       | 0.40        |      |

SOD-523 (REV: R3)

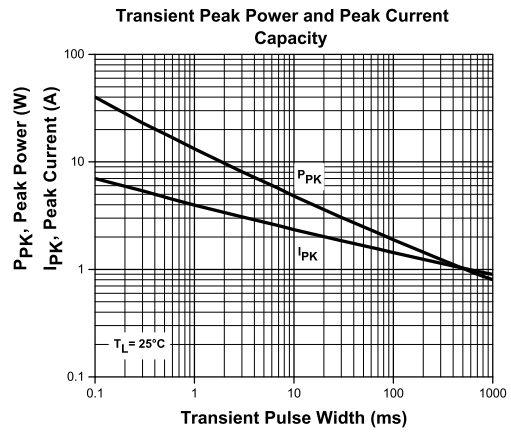
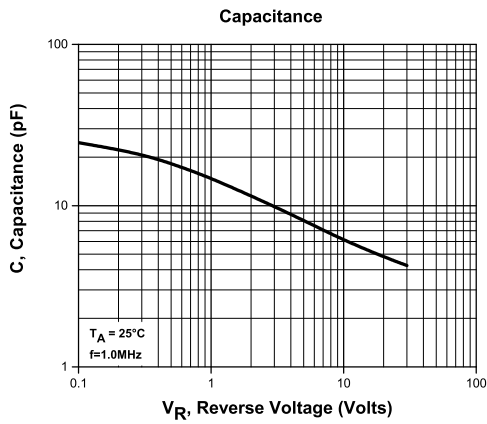
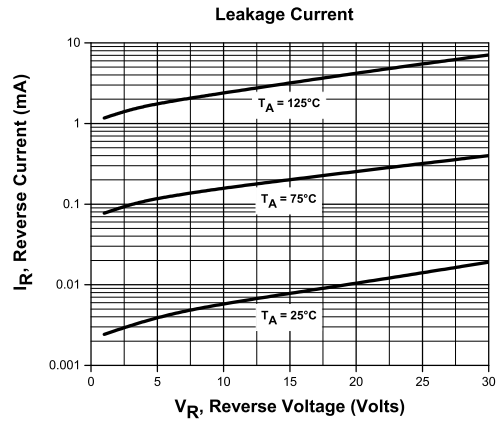
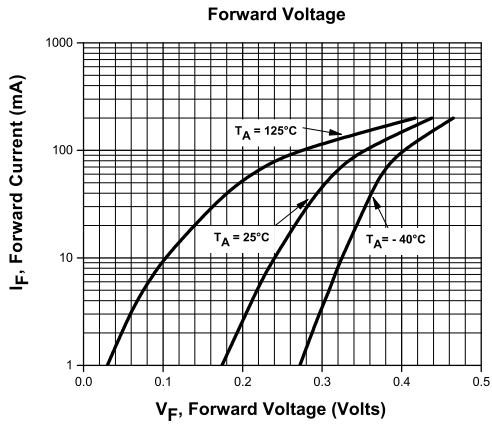
R6 (13-November 2015)

CMOSH2-4L

SURFACE MOUNT SILICON  
HIGH CURRENT  
LOW  $V_F$  SCHOTTKY DIODE



TYPICAL ELECTRICAL CHARACTERISTICS



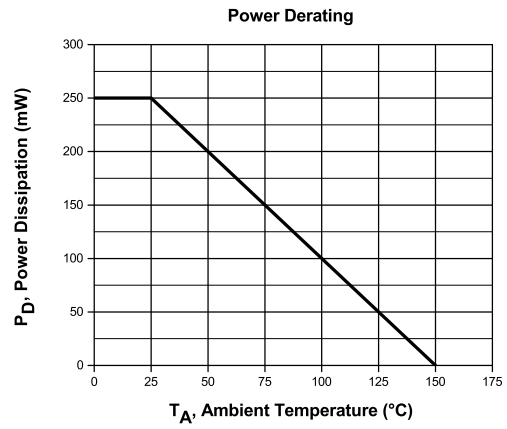
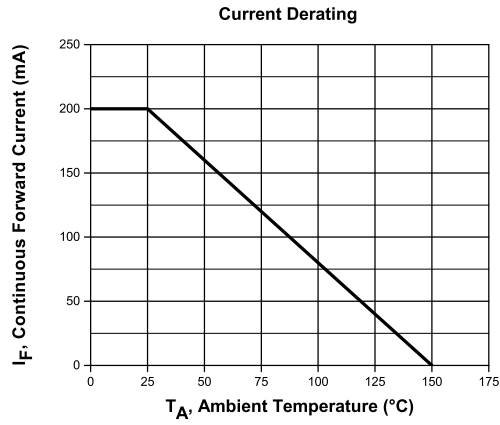
R6 (13-November 2015)

CMOSH2-4L

SURFACE MOUNT SILICON  
HIGH CURRENT  
LOW  $V_F$  SCHOTTKY DIODE



TYPICAL ELECTRICAL CHARACTERISTICS



R6 (13-November 2015)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



---

### 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

---

### 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

---

### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

---

### CONTACT US

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.  
145 Adams Avenue  
Hauppauge, NY 11788 USA  
Main Tel: (631) 435-1110  
Main Fax: (631) 435-1824  
Support Team Fax: (631) 435-3388  
[www.centrasemi.com](http://www.centrasemi.com)

**Worldwide Field Representatives:**  
[www.centrasemi.com/wwreps](http://www.centrasemi.com/wwreps)

**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.com/wwdistributors)

---

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: [www.centrasemi.com/terms](http://www.centrasemi.com/terms)