

CMSSH-3  
CMSSH-3A  
CMSSH-3C  
CMSSH-3S

**SURFACE MOUNT SILICON  
SCHOTTKY DIODES**



**SOT-323 CASE**



[www.centra-semi.com](http://www.centra-semi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSSH-3 series devices are silicon Schottky diodes, epoxy molded in an SOT-323 surface mount package, designed for fast switching applications requiring a low forward voltage drop.

**CMSSH-3:** SINGLE  
**CMSSH-3A:** DUAL, COMMON ANODE  
**CMSSH-3C:** DUAL, COMMON CATHODE  
**CMSSH-3S:** DUAL, IN SERIES

**MARKING CODE: 95D**  
**MARKING CODE: B1D**  
**MARKING CODE: B2D**  
**MARKING CODE: A5D**

**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**

$V_{RRM}$  30  
 $I_F$  100  
 $I_{FRM}$  200  
 $I_{FSM}$  750  
 $P_D$  275  
 $T_J, T_{stg}$  -65 to +150  
 $\Theta_{JA}$  455

**UNITS**

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

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

| SYMBOL   | TEST CONDITIONS                                           | MIN | TYP  | MAX  | UNITS         |
|----------|-----------------------------------------------------------|-----|------|------|---------------|
| $I_R$    | $V_R=25\text{V}$                                          |     | 90   | 500  | nA            |
| $I_R$    | $V_R=25\text{V}, T_A=100^{\circ}\text{C}$                 |     | 25   | 100  | $\mu\text{A}$ |
| $BV_R$   | $I_R=100\mu\text{A}$                                      | 30  |      |      | V             |
| $V_F$    | $I_F=2.0\text{mA}$                                        |     | 0.29 | 0.33 | V             |
| $V_F$    | $I_F=15\text{mA}$                                         |     | 0.37 | 0.45 | V             |
| $V_F$    | $I_F=100\text{mA}$                                        |     | 0.51 | 1.00 | V             |
| $C_J$    | $V_R=1.0\text{V}, f=1.0\text{MHz}$                        |     | 7.0  |      | pF            |
| $t_{rr}$ | $I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$ |     |      | 5.0  | ns            |

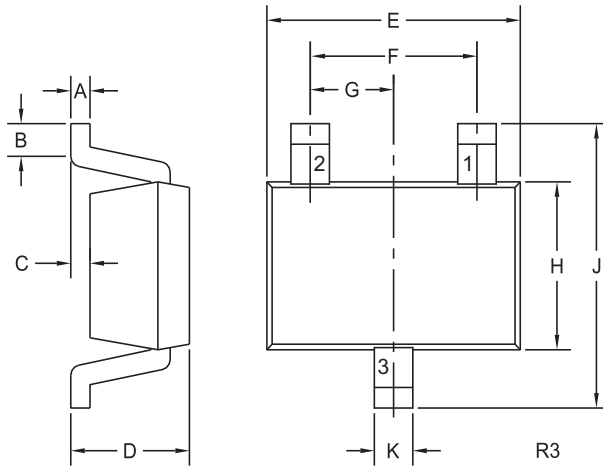
R4 (11-February 2016)

CMSSH-3  
CMSSH-3A  
CMSSH-3C  
CMSSH-3S

SURFACE MOUNT SILICON  
SCHOTTKY DIODES



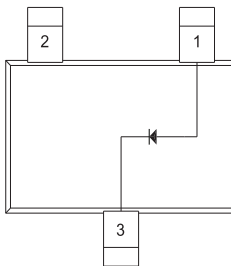
## SOT-323 CASE - MECHANICAL OUTLINE



| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | INCHES     |       | MILLIMETERS |      |
|        | MIN        | MAX   | MIN         | MAX  |
| A      | 0.002      | 0.008 | 0.05        | 0.20 |
| B      | 0.004      | -     | 0.10        | -    |
| C      | -          | 0.004 | -           | 0.10 |
| D      | 0.031      | 0.043 | 0.80        | 1.10 |
| E      | 0.071      | 0.087 | 1.80        | 2.20 |
| F      | 0.051      |       | 1.30        |      |
| G      | 0.026      |       | 0.65        |      |
| H      | 0.045      | 0.053 | 1.15        | 1.35 |
| J      | 0.079      | 0.087 | 2.00        | 2.20 |
| K      | 0.008      | 0.016 | 0.20        | 0.40 |

SOT-323 (REV: R3)

## PIN CONFIGURATIONS

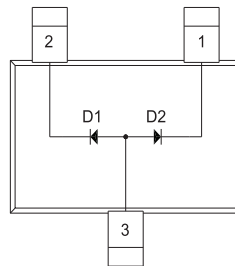


**CMSSH-3**

**LEAD CODE:**

- 1) Anode
- 2) NC
- 3) Cathode

**MARKING CODE: 95D**

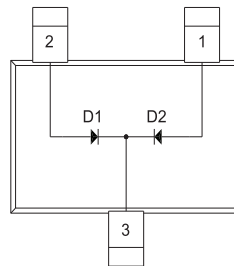


**CMSSH-3A**

**LEAD CODE:**

- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, D2

**MARKING CODE: B1D**

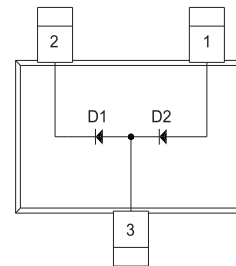


**CMSSH-3C**

**LEAD CODE:**

- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, D2

**MARKING CODE: B2D**



**CMSSH-3S**

**LEAD CODE:**

- 1) Anode D2
- 2) Cathode D1
- 3) Anode D1, Cathode D2

**MARKING CODE: A5D**

R4 (11-February 2016)

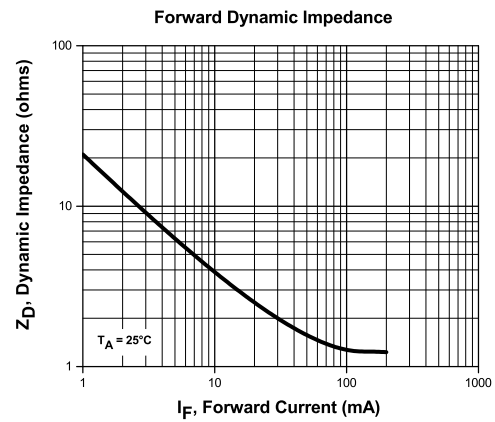
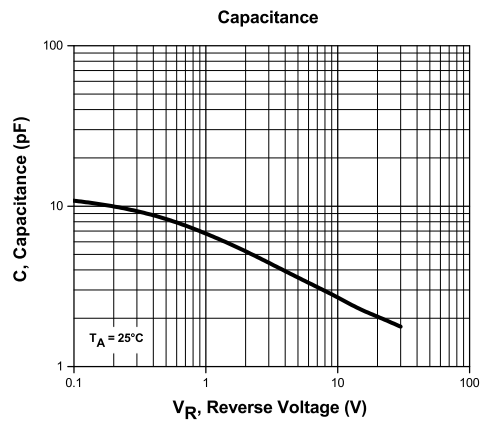
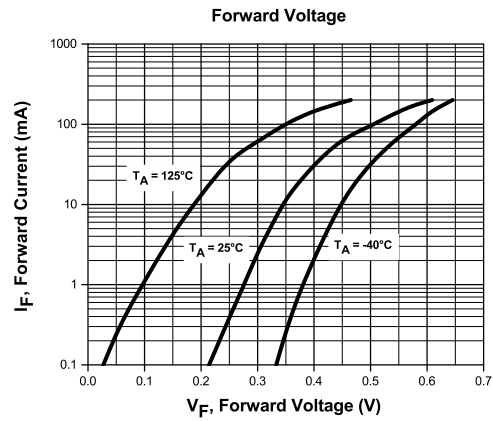
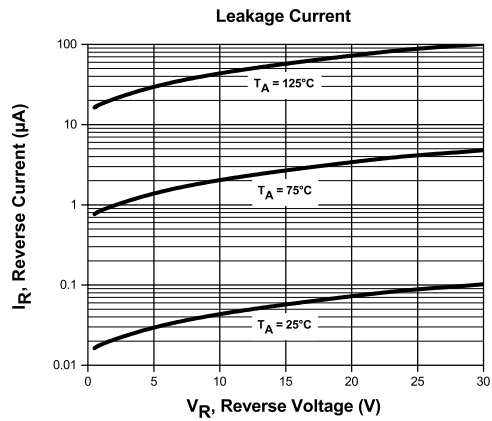
[www.centalsemi.com](http://www.centalsemi.com)

CMSSH-3  
CMSSH-3A  
CMSSH-3C  
CMSSH-3S

SURFACE MOUNT SILICON  
SCHOTTKY DIODES



## TYPICAL ELECTRICAL CHARACTERISTICS



R4 (11-February 2016)

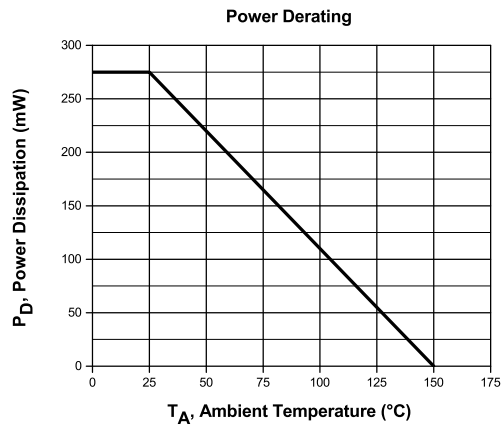
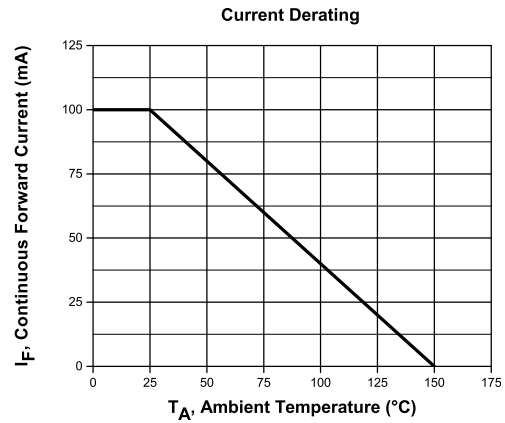
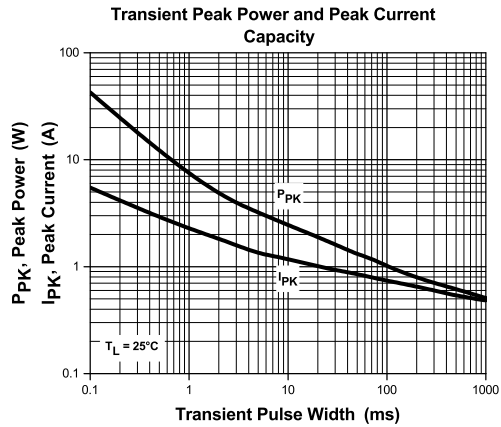
[www.centrasemi.com](http://www.centrasemi.com)

CMSSH-3  
CMSSH-3A  
CMSSH-3C  
CMSSH-3S

SURFACE MOUNT SILICON  
SCHOTTKY DIODES



## TYPICAL ELECTRICAL CHARACTERISTICS



R4 (11-February 2016)

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

## 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)