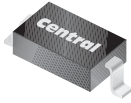


CMHD3595

**SURFACE MOUNT  
LOW LEAKAGE  
SILICON DIODE**



**SOD-123 CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMHD3595 is a Silicon Diode, manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for high conductance applications requiring low leakage.

**MARKING CODE: C95**

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

Peak Repetitive Reverse Voltage  
Peak Working Reverse Voltage  
Average Forward Current  
Continuous Forward Current  
Recurrent Peak Forward Current  
Peak Forward Surge Current,  $t_p=1.0\text{s}$   
Peak Forward Surge Current,  $t_p=1.0\mu\text{s}$   
Power Dissipation  
Operating and Storage Junction Temperature  
Thermal Resistance

**SYMBOL**

$V_{RRM}$  150  
 $V_{RWM}$  125  
 $I_O$  150  
 $I_F$  225  
 $i_f$  600  
 $I_{FSM}$  500  
 $I_{FSM}$  4.0  
 $P_D$  400  
 $T_J, T_{stg}$  -65 to +150  
 $\Theta_{JA}$  312.5

**UNITS**

V  
V  
mA  
mA  
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  | MAX  | UNITS         |
|----------|---|------|------|---------------|
| $I_R$    | $V_R=125\text{V}$   |      | 1.0  | nA            |
| $I_R$    | $V_R=125\text{V}, T_A=125^\circ\text{C}$                  |      | 500  | nA            |
| $I_R$    | $V_R=125\text{V}, T_A=150^\circ\text{C}$                  |      | 3.0  | $\mu\text{A}$ |
| $I_R$    | $V_R=30\text{V}, T_A=125^\circ\text{C}$                   |      | 300  | nA            |
| $BV_R$   | $I_R=100\mu\text{A}$                                      | 150  |      | V             |
| $V_F$    | $I_F=1.0\text{mA}$  | 0.54 | 0.69 | V             |
| $V_F$    | $I_F=5.0\text{mA}$  | 0.62 | 0.77 | V             |
| $V_F$    | $I_F=10\text{mA}$   | 0.65 | 0.80 | V             |
| $V_F$    | $I_F=50\text{mA}$   | 0.75 | 0.88 | V             |
| $V_F$    | $I_F=100\text{mA}$  | 0.79 | 0.92 | V             |
| $V_F$    | $I_F=200\text{mA}$  | 0.83 | 1.00 | V             |
| $C_T$    | $V_R=0, f=1.0\text{MHz}$                                  |      | 8.0  | pF            |
| $t_{rr}$ | $V_R=3.5\text{V}, I_F=10\text{mA}, R_L=1.0\text{k}\Omega$ |      | 3.0  | $\mu\text{s}$ |

R5 (5-August 2010)

CMHD3595

SURFACE MOUNT  
LOW LEAKAGE  
SILICON DIODE



SOD-123 CASE - MECHANICAL OUTLINE



R5

LEAD CODE

- 1) Cathode
- 2) Anode

MARKING CODE: C95

| DIMENSIONS |        |       |             |      |
|------------|--------|-------|-------------|------|
| SYMBOL     | INCHES |       | MILLIMETERS |      |
|            | MIN    | MAX   | MIN         | MAX  |
| A          | 0.037  | 0.053 | 0.95        | 1.35 |
| B          | 0.000  | 0.005 | 0.00        | 0.12 |
| C          | -      | 0.008 | -           | 0.20 |
| D          | 0.055  | 0.071 | 1.40        | 1.80 |
| E          | 0.098  | 0.110 | 2.50        | 2.80 |
| F          | 0.142  | 0.154 | 3.60        | 3.90 |
| G          | 0.016  | -     | 0.40        | -    |
| H          | 0.020  | 0.028 | 0.50        | 0.70 |
| J          | 0.010  | -     | 0.25        | -    |

SOD-123 (REV:R5)

R5 (5-August 2010)

## 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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