

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
$I_R$	$V_R=125\text{V}, T_A=125^\circ\text{C}$		2.0	$\mu\text{A}$
$I_R$	$V_R=125\text{V}, T_A=150^\circ\text{C}$		5.0	$\mu\text{A}$
$I_R$	$V_R=30\text{V}, T_A=125^\circ\text{C}$		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
$C_J$	$V_R=0, f=1.0\text{MHz}$		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	$\mu\text{s}$

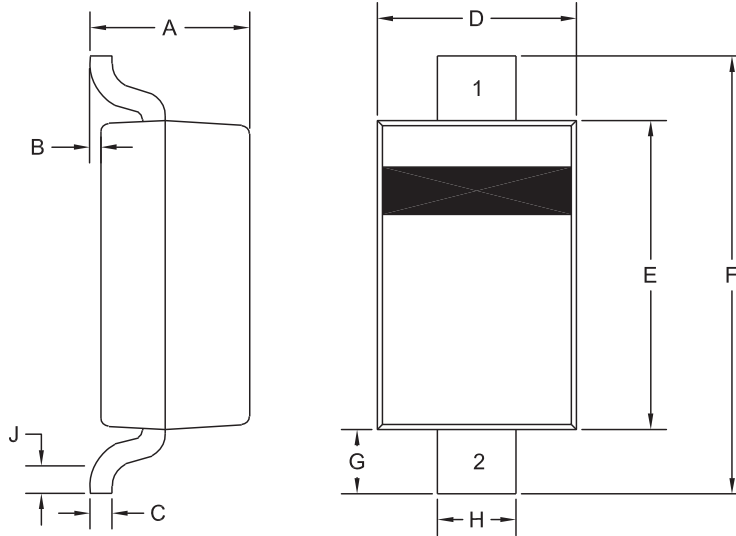
R6 (17-June 2019)

CMHD3595

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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)

R6 (17-June 2019)

## 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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### 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).

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### CONTACT US

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