

CSHD3-100

**SURFACE MOUNT SILICON  
HIGH VOLTAGE  
SCHOTTKY RECTIFIER  
3.0 AMP, 100 VOLT**



**DPAK CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSHD3-100 is a silicon Schottky rectifier designed for high voltage applications requiring a low forward voltage drop.

**MARKING: FULL PART NUMBER**

**MAXIMUM RATINGS:** ( $T_C=25^{\circ}\text{C}$  unless otherwise noted)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Average Rectified Forward Current ( $T_C=120^{\circ}\text{C}$ )	$I_O$	3.0	A
Peak Forward Surge Current, $t_p=10\text{ms}$	$I_{FSM}$	50	A
Peak Repetitive Reverse Surge Current, $t_p=2.0\mu\text{s}$	$I_{RRM}$	1.0	A
Critical Rate of Rise of Reverse Voltage	$dv/dt$	10,000	V/ $\mu\text{s}$
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	$\theta_{JC}$	3.5	$^{\circ}\text{C}/\text{W}$

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

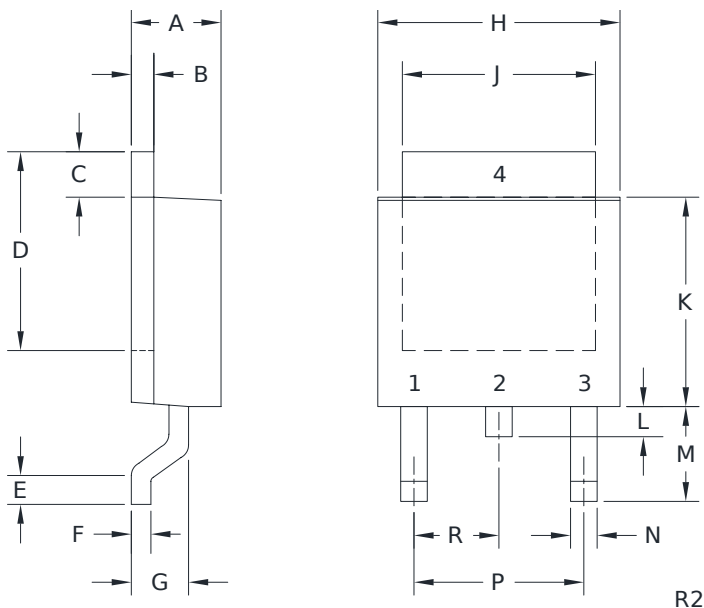
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	$V_R=100\text{V}$	9.0	30	$\mu\text{A}$
$I_R$	$V_R=100\text{V}, T_C=125^{\circ}\text{C}$	6.7	10	mA
$V_F$	$I_F=3.0\text{A}$	0.61	0.85	V
$V_F$	$I_F=3.0\text{A}, T_C=125^{\circ}\text{C}$	0.52	0.80	V
$C_J$	$V_R=0, f=1.0\text{MHz}$	676		pF

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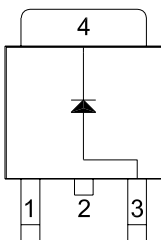
**DPAK CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) No Connection
  - 2) Cathode
  - 3) Anode
  - 4) Cathode
- Pin 2 is common to the tab (4)

**MARKING: FULL PART NUMBER**



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.083	0.108	2.10	2.75
B	0.016	0.035	0.40	0.89
C	0.035	0.063	0.89	1.60
D	0.203	0.228	5.15	5.79
E	0.020	-	0.51	-
F	0.016	0.024	0.40	0.60
G	0.061		1.55	
H	0.248	0.268	6.30	6.81
J	0.195	0.217	4.95	5.50
K	0.209	0.245	5.30	6.22
L	0.033		0.83	
M	0.090	0.115	2.30	2.91
N	0.012	0.045	0.30	1.14
P	0.180		4.60	
R	0.090		2.30	

DPAK(REV:R2)

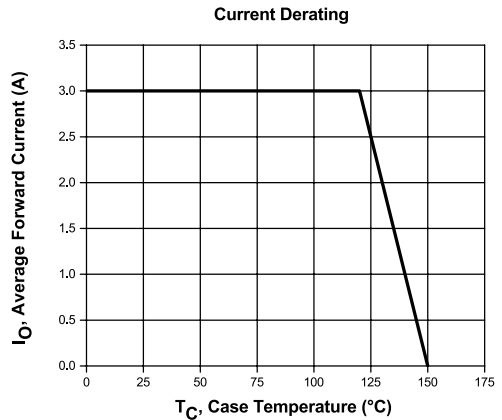
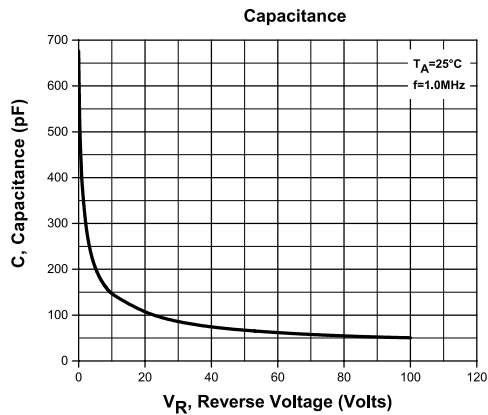
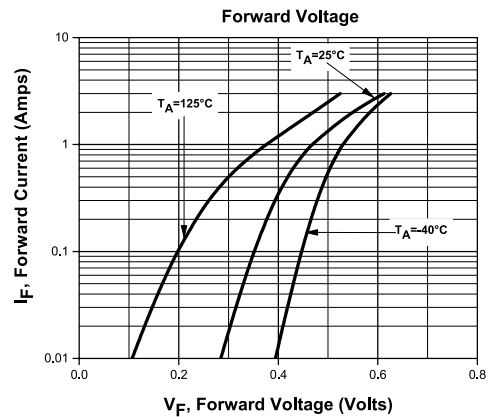
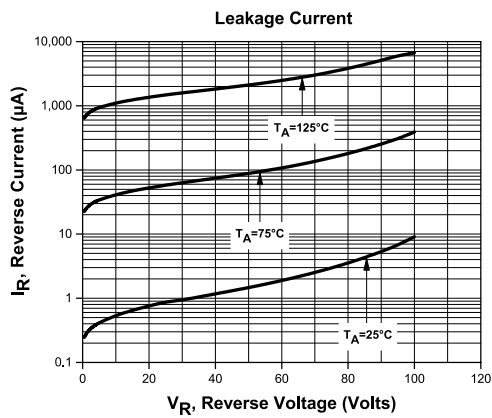
R7 (23-August 2023)

CSD3-100

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SCHOTTKY RECTIFIER  
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**TYPICAL ELECTRICAL CHARACTERISTICS**



## 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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