

CSHD6-100C

**SURFACE MOUNT SILICON
DUAL, COMMON CATHODE
HIGH VOLTAGE
SCHOTTKY RECTIFIER
6.0 AMP, 100 VOLT**

www.centralsemi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSHD6-100C is a silicon Schottky rectifier designed for high voltage applications requiring a low forward voltage drop.

**DPAK CASE****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	6.0	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/ μs
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	θ_{JC}	3.5	$^{\circ}\text{C/W}$

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

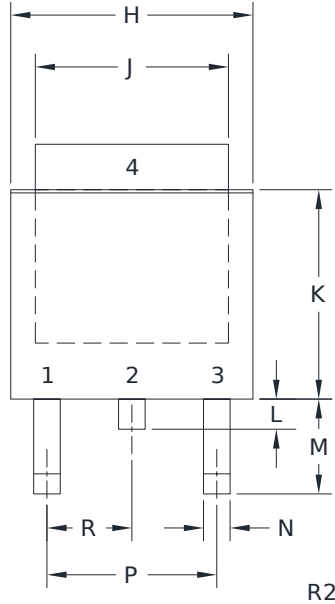
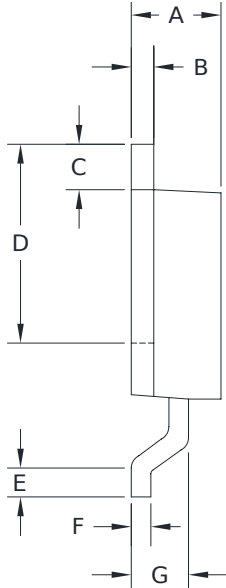
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=100\text{V}$	0.34	30	μA
I_R	$V_R=100\text{V}, T_C=125^{\circ}\text{C}$	0.39	10	mA
V_F	$I_F=3.0\text{A}$	0.73	0.75	V
V_F	$I_F=3.0\text{A}, T_C=125^{\circ}\text{C}$	0.63	0.70	V
V_F	$I_F=6.0\text{A}$	0.82	1.10	V
V_F	$I_F=6.0\text{A}, T_C=125^{\circ}\text{C}$	0.72	1.05	V
C_J	$V_R=0, f=1.0\text{MHz}$	321		pF

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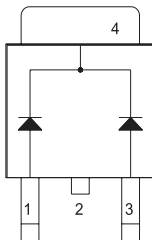
DPAK CASE - MECHANICAL OUTLINE



LEAD CODE:

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

R8 (23-August 2023)

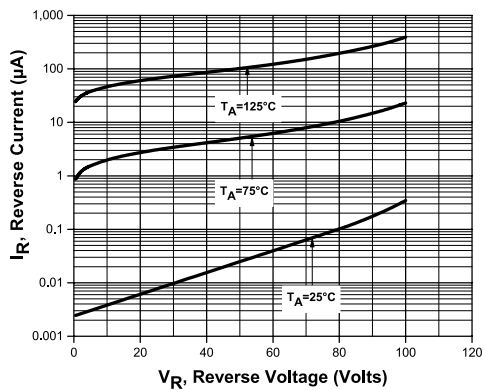
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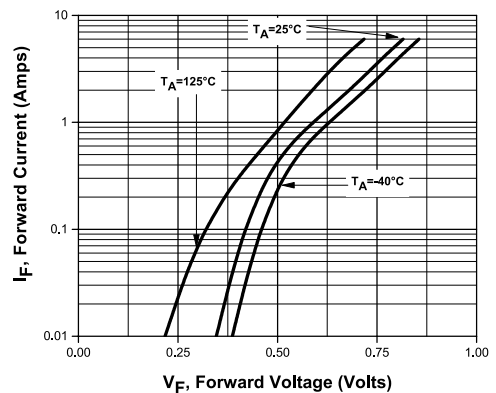


TYPICAL ELECTRICAL CHARACTERISTICS

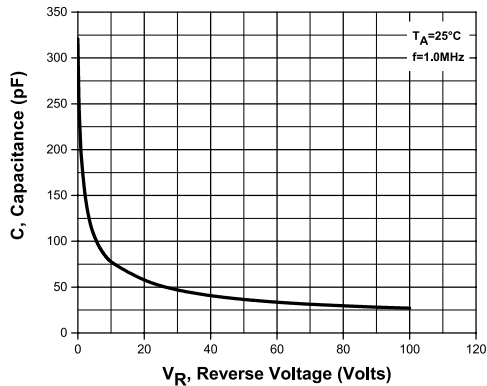
Leakage Current



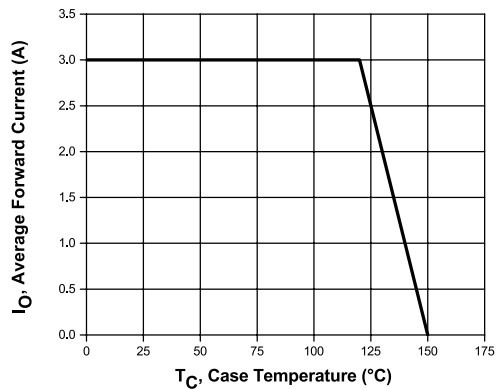
Forward Voltage per diode



Capacitance



Current Derating



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 (2nd 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

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