

CSHD6-100C

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



www.centrasemi.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	$^\circ\text{C}/\text{W}$

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

R7 (1-March 2016)

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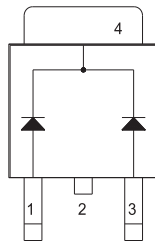
DPAK CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Anode 1
 - 2) Cathode
 - 3) Anode 2
 - 4) Cathode
- Pin 2 is common to the tab (4)

MARKING: FULL PART NUMBER



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.083	0.108	2.10	2.75
B	0.016	0.032	0.40	0.81
C	0.035	0.063	0.89	1.60
D	0.203	0.228	5.15	5.79
E	0.020	-	0.51	-
F	0.018	0.024	0.45	0.60
G	0.051	0.071	1.30	1.80
H	0.248	0.268	6.30	6.81
J	0.197	0.217	5.00	5.50
K	0.209	0.245	5.30	6.22
L	0.025	0.040	0.64	1.02
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: R0)

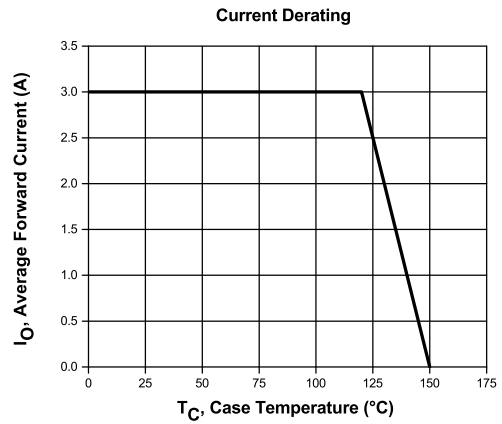
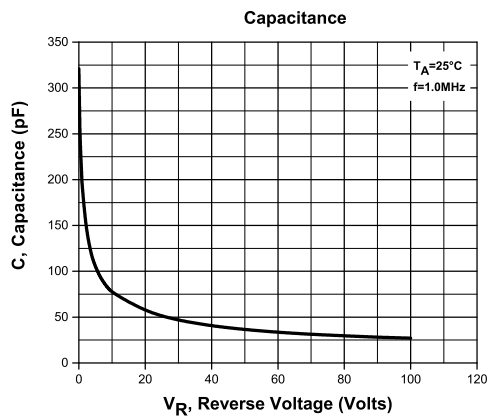
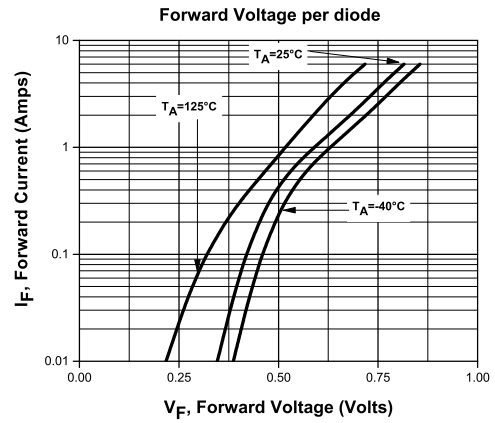
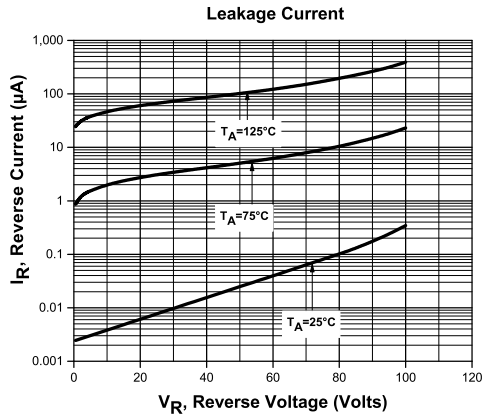
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TYPICAL ELECTRICAL CHARACTERISTICS



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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).

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