

CHD8-06

SURFACE MOUNT SILICON
HYPERFAST
POWER RECTIFIER
8.0 AMP, 600 VOLT

Central
Semiconductor

www.centrasemi.com

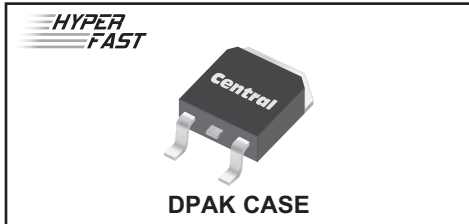
DESCRIPTION:

The CENTRAL SEMICONDUCTOR CHD8-06 is a high voltage silicon HyperFast power rectifier designed for extremely fast switching applications.

MARKING: FULL PART NUMBER

FEATURES:

- High current capability
- High surge capacity
- HyperFast recovery time (22ns TYP)
- High voltage



APPLICATIONS:

- Power factor correction
- Motor control

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

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
DC Blocking Voltage	V_R	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	420	V
Average Forward Current ($T_L=100^{\circ}\text{C}$)	I_O	8.0	A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}	70	A
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +175	$^{\circ}\text{C}$
Thermal Resistance	θ_{JL}	5.0	$^{\circ}\text{C/W}$

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

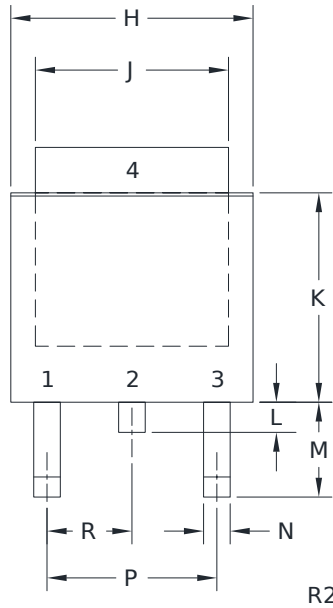
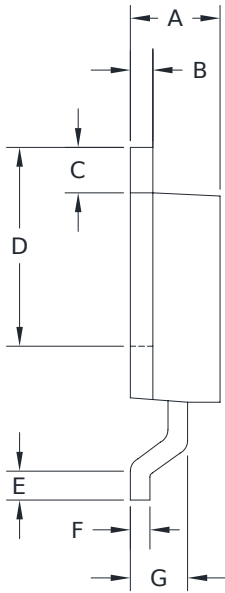
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=600\text{V}$		10	μA
I_R	$V_R=600\text{V}, T_A=150^{\circ}\text{C}$		500	μA
V_F	$I_F=8.0\text{A}$	1.9	2.2	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$	26	35	pF
t_{rr}	$I_F=8.0\text{A}, V_R=400\text{V}, di/dt=200\text{A}/\mu\text{s}$	22	25	ns

CHD8-06

**SURFACE MOUNT SILICON
HYPERFAST
POWER RECTIFIER
8.0 AMP, 600 VOLT**



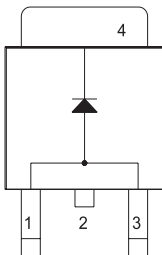
DPAK CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Anode
 - 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)

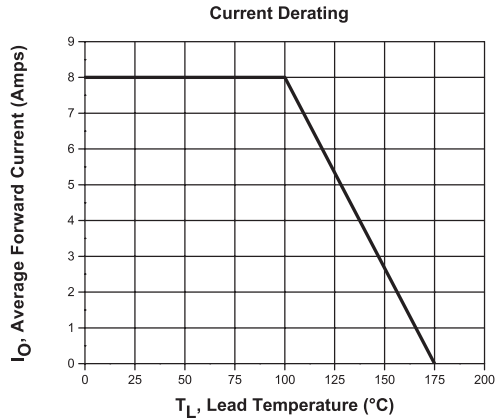
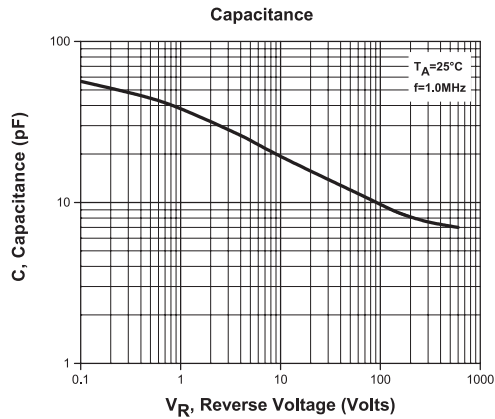
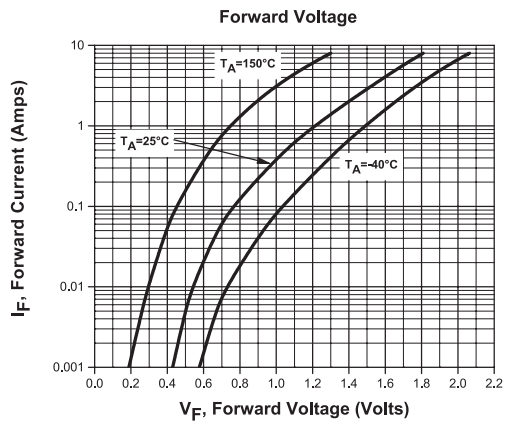
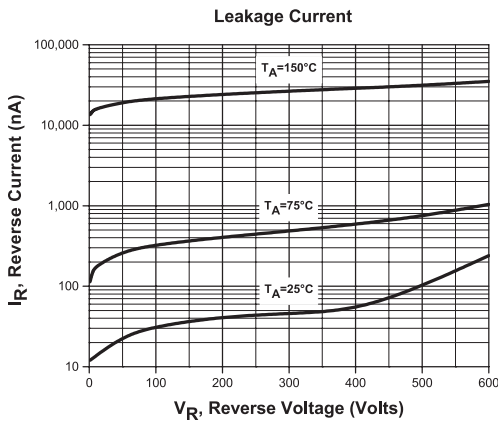
R4 (22-August 2023)

CHD8-06

SURFACE MOUNT SILICON
HYPERFAST
POWER RECTIFIER
8.0 AMP, 600 VOLT



TYPICAL ELECTRICAL CHARACTERISTICS



R4 (22-August 2023)

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

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms