

CHD8-06

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

**HYPER
FAST**



DPAK CASE

APPLICATIONS:

- Power factor correction
- Motor control



www.centralemi.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

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)

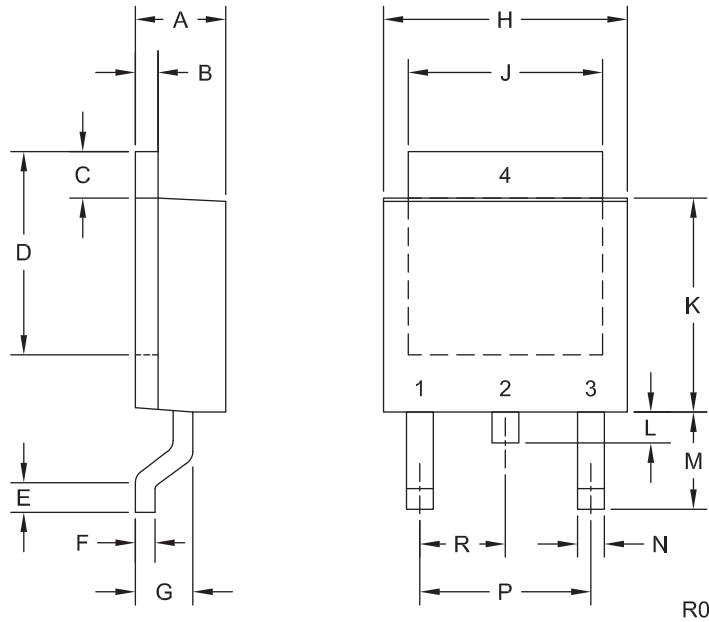
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=600\text{V}$		10	μA
I_R	$V_R=600\text{V}, T_A=150^{\circ}\text{C}$		500	μA
V_F	$I_F=8.0\text{A}$	1.9	2.9	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$	26		pF
t_{rr}	$I_F=8.0\text{A}, V_R=400\text{V}, di/dt=200\text{A}/\mu\text{s}$	22	25	ns

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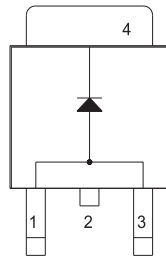
DPAK CASE - MECHANICAL OUTLINE



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	0.032	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)

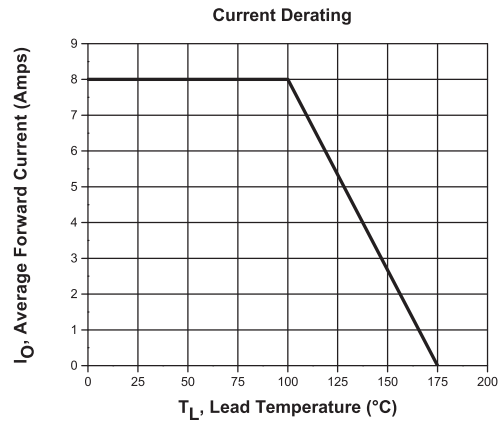
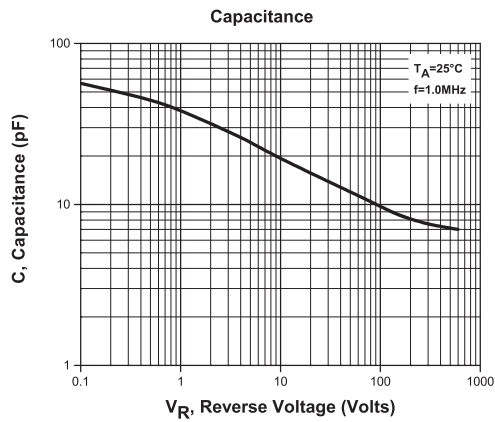
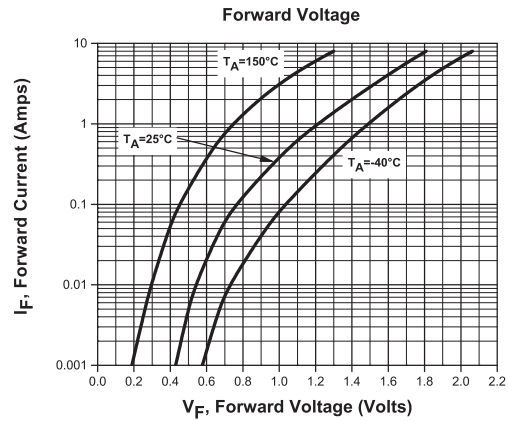
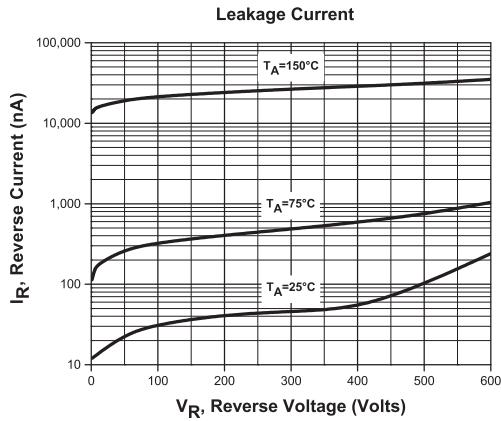
R1 (24-July 2013)

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TYPICAL ELECTRICAL CHARACTERISTICS



R1 (24-July 2013)