

CSHDD8-40  
CSHDD8-60  
CSHDD8-100

**SURFACE MOUNT SILICON  
SCHOTTKY RECTIFIERS  
8.0 AMP, 40 THRU 100 VOLT**



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

**D<sup>2</sup>PAK!**  
SUPER POWER



**D<sup>2</sup>PAK CASE**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSHDD8-40 series devices are silicon Schottky rectifiers designed for surface mount fast switching applications requiring a low forward voltage drop.

**MARKING: FULL PART NUMBER**

**FEATURES:**

- High reliability
- Low forward voltage
- High current capability
- High surge capacity
- UL flammability classification 94V-O
- Superior lot to lot consistency
- Low power loss, high efficiency
- High voltage

**MAXIMUM RATINGS:** (T<sub>C</sub>=25°C unless otherwise noted)

	SYMBOL	CSHDD8-40	CSHDD8-60	CSHDD8-100	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	40	60	100	V
DC Blocking Voltage	V <sub>R</sub>	40	60	100	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	42	70	V
Average Forward Current (T <sub>C</sub> =100°C)	I <sub>O</sub>		8.0		A
Peak Forward Surge Current, tp=8.3ms	I <sub>FSM</sub>		150		A
Critical Rate of Rise of Reverse Voltage	dv/dt		10,000		V/μs
Operating and Storage					
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>		-65 to +150		°C
Thermal Resistance	θ <sub>JC</sub>		2.0		°C/W
Thermal Resistance	θ <sub>JA</sub>		50		°C/W

**ELECTRICAL CHARACTERISTICS:** (T<sub>C</sub>=25°C unless otherwise noted)

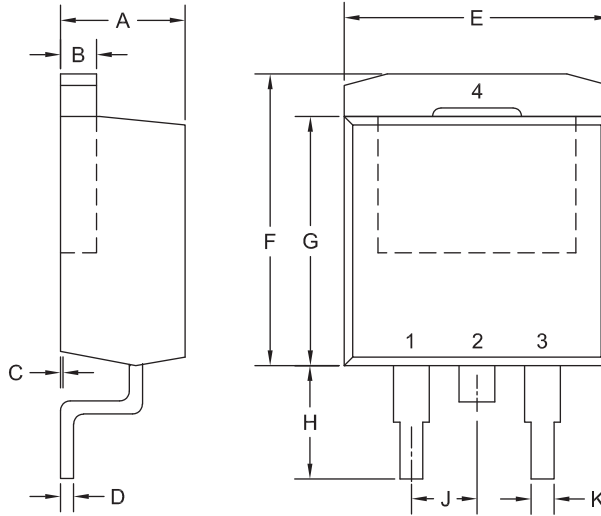
SYMBOL	TEST CONDITIONS	CSHDD8-40		CSHDD8-60		CSHDD8-100		UNITS
		TYP	MAX	TYP	MAX	TYP	MAX	
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub>	23	100	18	100	4.0	100	μA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>C</sub> =125°C	23	50	25	50	4.0	50	mA
V <sub>F</sub>	I <sub>F</sub> =8.0A	0.51	0.65	0.60	0.75	0.74	0.85	V
V <sub>F</sub>	I <sub>F</sub> =8.0A, T <sub>C</sub> =125°C	0.46	0.57	0.55	0.65	0.58	0.75	V
V <sub>F</sub>	I <sub>F</sub> =16A	0.63	0.84	0.78	0.95	0.82	1.10	V
V <sub>F</sub>	I <sub>F</sub> =16A, T <sub>C</sub> =125°C	0.61	0.72	0.66	0.85	0.66	1.00	V
C <sub>J</sub>	V <sub>R</sub> =4.0V, f=1.0MHz	300	-	300	-	300	-	pF

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**D<sup>2</sup>PAK CASE - MECHANICAL OUTLINE**

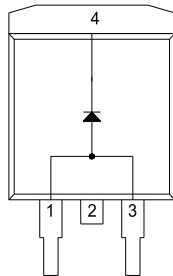


R3

**LEAD CODE:**

- 1) Anode
  - 2) Cathode
  - 3) Anode
  - 4) Cathode
- Pin 2 is Common to the Tab (4).

**MARKING: FULL PART NUMBER**



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.163	0.189	4.14	4.80
B	0.045	0.055	1.14	1.40
C	0.000	0.010	0.00	0.25
D	0.012	0.028	0.30	0.70
E	0.386	0.415	9.80	10.55
F	0.378	0.417	9.60	10.60
G	0.335	0.358	8.50	9.10
H	0.188	0.236	4.78	6.00
J	0.093	0.108	2.35	2.75
K	0.030	0.035	0.75	0.90

D2PAK (REV: R3)

R6 (11-January 2018)

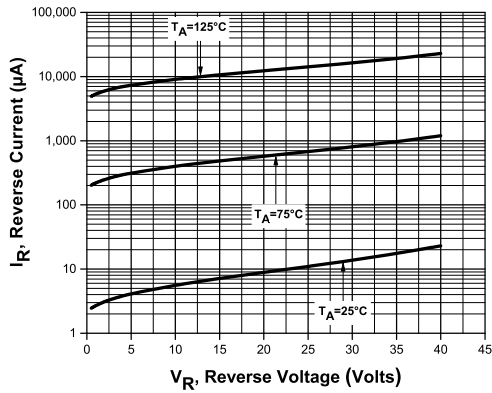
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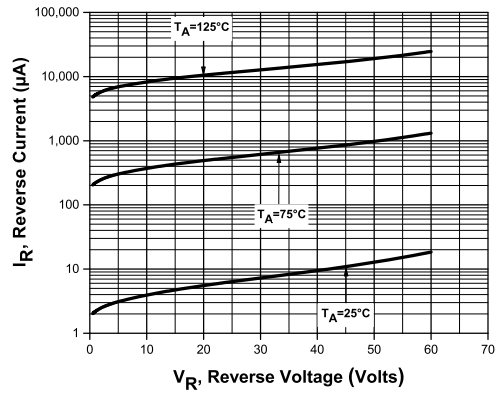
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TYPICAL ELECTRICAL CHARACTERISTICS

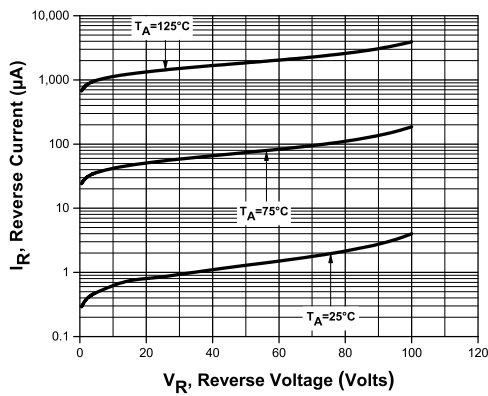
Leakage Current for CSHDD8-40



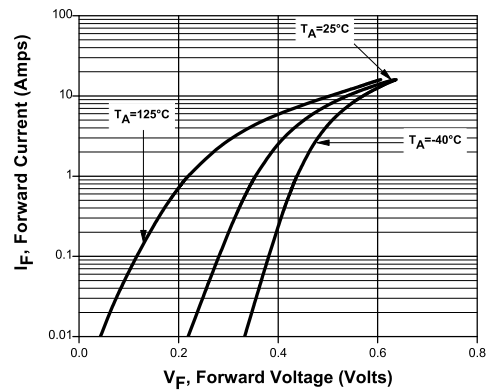
Leakage Current for CSHDD8-60



Leakage Current for CSHDD8-100



Forward Voltage for CSHDD8-40



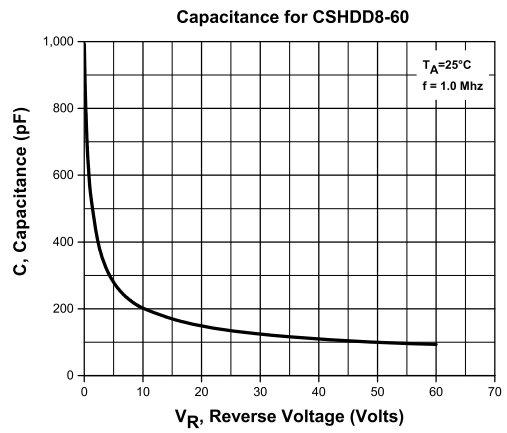
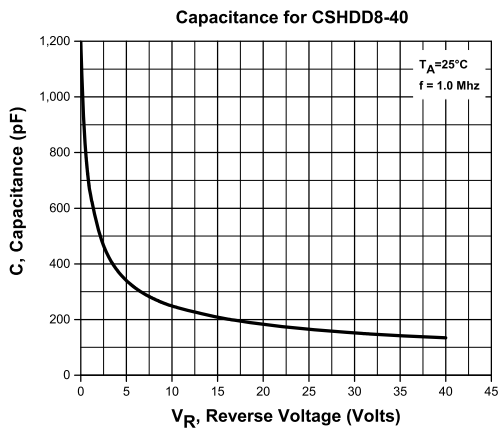
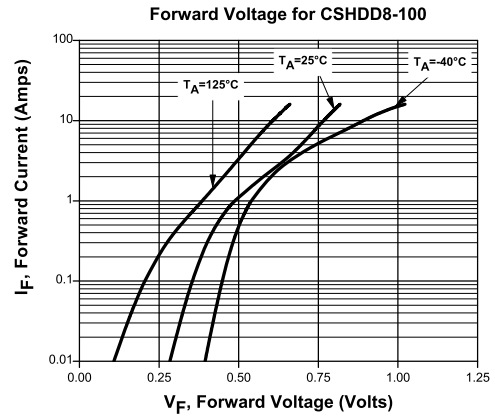
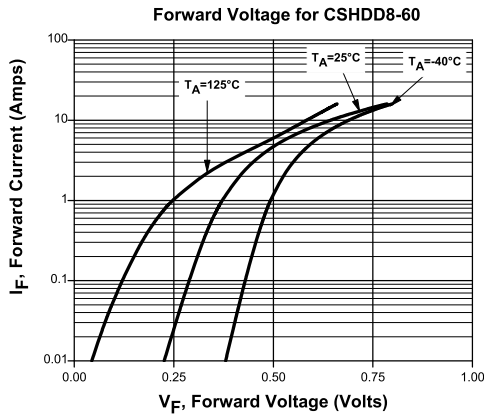
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TYPICAL ELECTRICAL CHARACTERISTICS



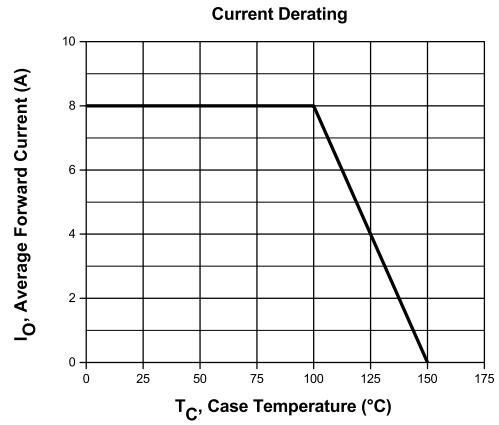
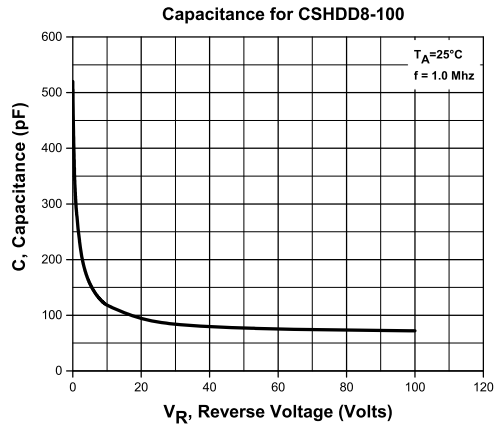
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### TYPICAL ELECTRICAL CHARACTERISTICS



R6 (11-January 2018)

## 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

#### Corporate Headquarters & Customer Support Team

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