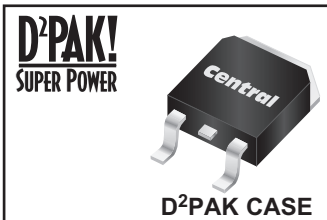
CSHDD8-40
CSHDD8-60
CSHDD8-100

SURFACE MOUNT SILICON SCHOTTKY RECTIFIER
8.0 AMP, 40 THRU 100 VOLT



D²PAK CASE

Central Semiconductor Corp.

www.centralsemi.com

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 effeciency
- High voltage

MAXIMUM RATINGS: (T_C=25°C unless otherwise noted)

	SYMBOL	CSHDD8-40	CSHDD8-60	CSHDD8-100	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	40	60	100	V
DC Blocking Voltage	V_R	40	60	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	42	70	V
Average Forward Current (T_C=100°C)	I_O		8.0		A
Peak Forward Surge Current, tp=8.3ms	I_{FSM}		150		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		°C
Thermal Resistance	Θ_{JC}		2.0		°C/W
Thermal Resistance	Θ_{JA}		50		°C/W

ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

		CSHDD8-40		CSHDD8-60		CSHDD8-100		
SYMBOL	TEST CONDITIONS	TYP	MAX	TYP	MAX	TYP	MAX	UNITS
I_R	V_R=Rated V_{RRM}	23	100	18	100	4.0	100	μA
I_R	V_R=Rated V_{RRM}, T_C=125°C	23	50	25	50	4.0	50	mA
V_F	I_F=8.0A	0.51	0.65	0.60	0.75	0.74	0.85	V
V_F	I_F=8.0A, T_C=125°C	0.46	0.57	0.55	0.65	0.58	0.75	V
V_F	I_F=16A	0.63	0.84	0.78	0.95	0.82	1.10	V
V_F	I_F=16A, T_C=125°C	0.61	0.72	0.66	0.85	0.66	1.00	V
C_J	V_R=4.0V, f=1.0MHz	300	-	300	-	300	-	pF

R5 (17-February 2016)

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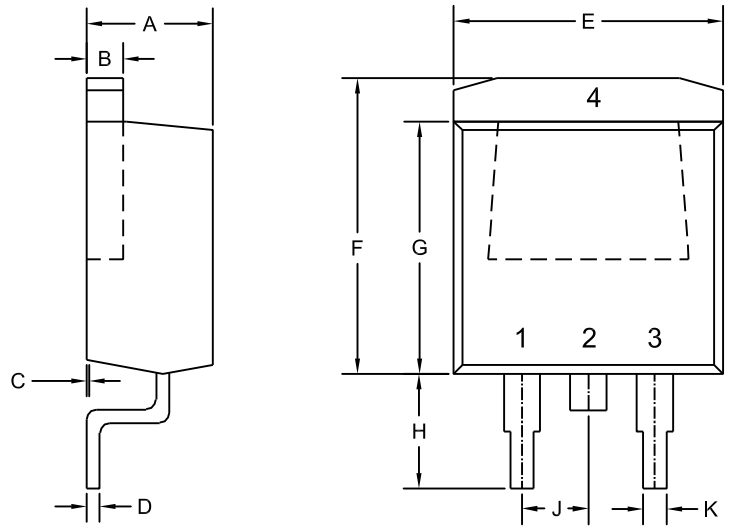
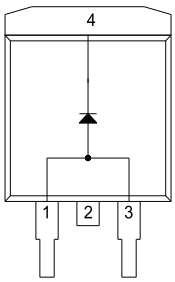
D²PAK CASE - MECHANICAL OUTLINE



R2

LEAD CODE:
1) Anode
2) Cathode
3) Anode
4) Cathode
Pin 2 is Common to the Tab (4).

MARKING: FULL PART NUMBER



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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	0.409	9.80	10.40
F	0.378	0.417	9.60	10.60
G	0.335	0.358	8.50	9.10
H	0.197	0.236	5.00	6.00
J	0.093	0.108	2.35	2.75
K	0.030	0.035	0.75	0.90

D2PAK (REV: R2)

R5 (17-February 2016)

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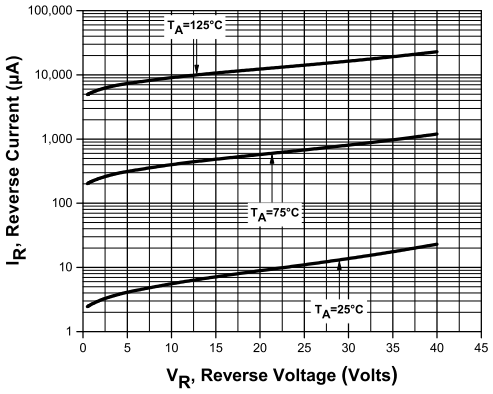
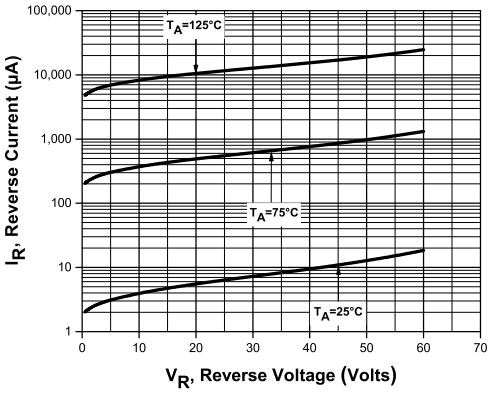
TYPICAL ELECTRICAL CHARACTERISTICS

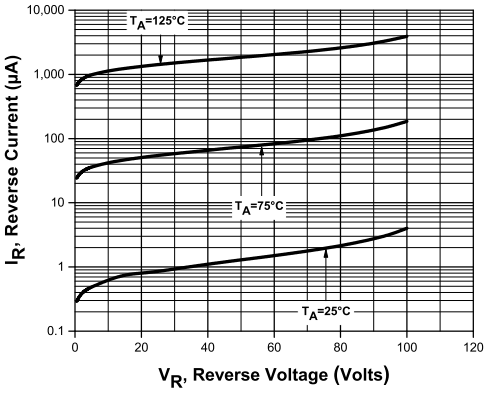
Leakage Current for CSHDD8-40



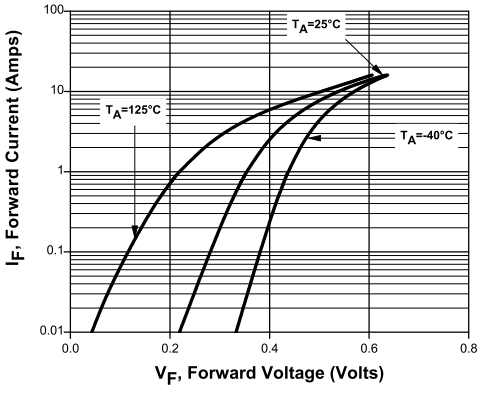
Leakage Current for CSHDD8-60



Leakage Current for CSHDD8-100



Forward Voltage for CSHDD8-40



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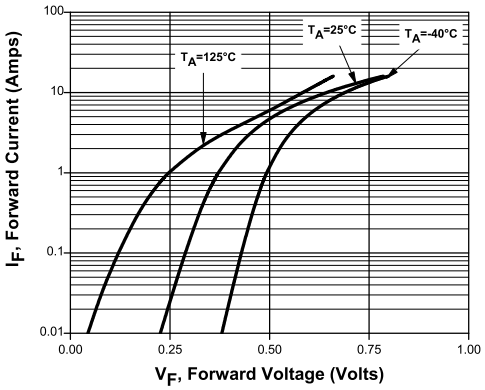
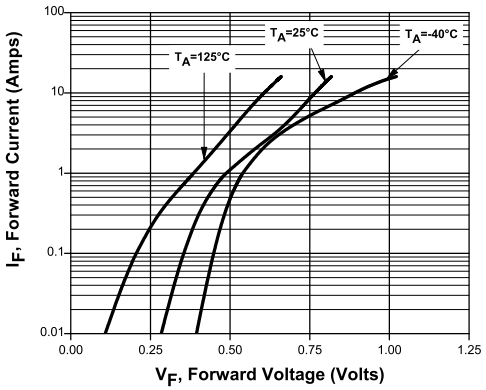
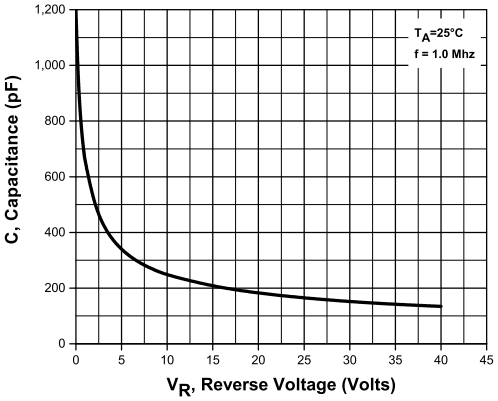
Forward Voltage for CSHDD8-60



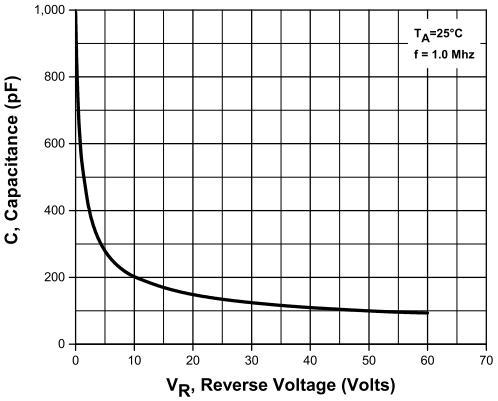
Forward Voltage for CSHDD8-100



Capacitance for CSHDD8-40



Capacitance for CSHDD8-60



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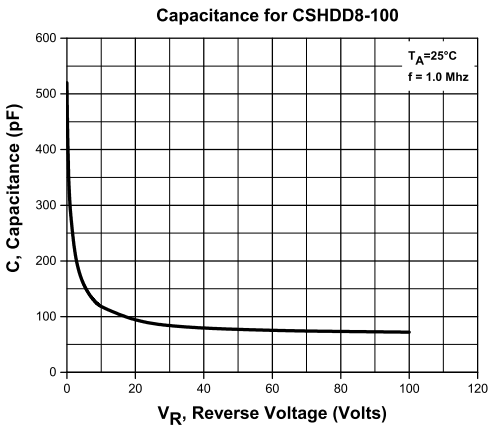
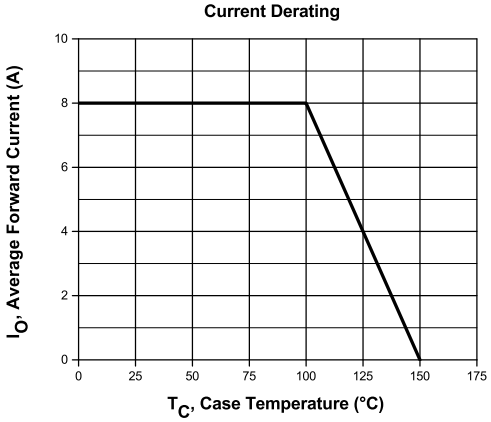
TYPICAL ELECTRICAL CHARACTERISTICS





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

CONTACT US

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