

CMSH3-100MHV
CMSH3-150MHV
CMSH3-200MHV

SURFACE MOUNT SILICON
SCHOTTKY RECTIFIERS
3.0 AMP, 100 THRU 200 VOLT



SMB CASE



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSH3-100MHV series 3.0 Amp surface mount silicon Schottky rectifier is a highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and lighting applications.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

FEATURES:

- High voltage capability
- Flammability classification UL94V-0
- Energy efficiency

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

	SYMBOL	CMSH3 -100MHV	CMSH3 -150MHV	CMSH3 -200MHV	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	150	200	V
DC Blocking Voltage	V_R	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	105	140	V
Average Forward Current ($T_L=125^\circ\text{C}$)	I_O		3.0		A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}		80		A
Operating and Storage Junction Temperature	T_J, T_{stg}		-65 to +175		$^\circ\text{C}$
Thermal Resistance	θ_{JL}		20		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}$		50	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_J=100^\circ\text{C}$		20	mA
V_F	$I_F=3.0\text{A}$ (CMSH3-100MHV)	0.76	0.80	V
V_F	$I_F=3.0\text{A}$ (CMSH3-150MHV)	0.80	0.90	V
V_F	$I_F=3.0\text{A}$ (CMSH3-200MHV)	0.82	0.90	V
C_J	$V_R=0, f=1.0\text{MHz}$ (CMSH3-100MHV)	334		pF
C_J	$V_R=0, f=1.0\text{MHz}$ (CMSH3-150MHV)	264		pF
C_J	$V_R=0, f=1.0\text{MHz}$ (CMSH3-200MHV)	197		pF

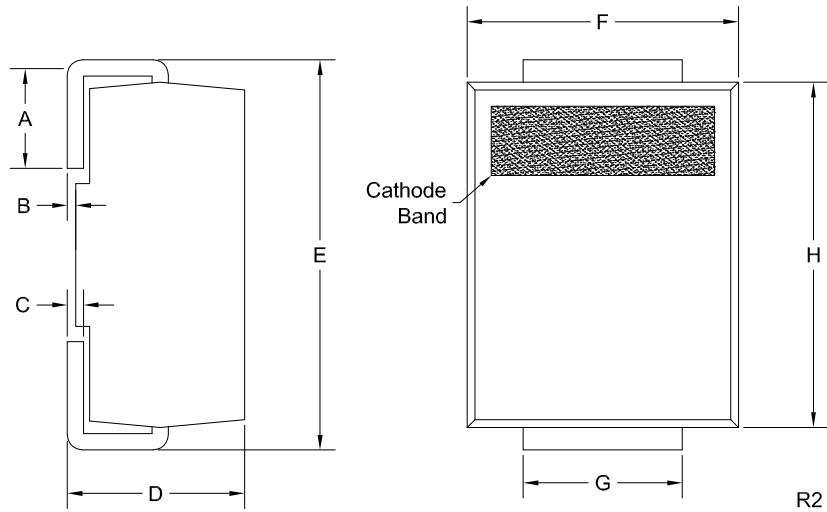
R3 (6-September 2018)

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SMB CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMSH3-100MHV	CS310MHV
CMSH3-150MHV	CS315MHV
CMSH3-200MHV	CS320MHV

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.000	0.008	0.00	0.20
C	0.006	0.012	0.15	0.30
D	0.086	0.096	2.18	2.44
E	0.200	0.220	5.08	5.59
F	0.130	0.150	3.30	3.81
G	0.077	0.083	1.96	2.11
H	0.160	0.191	4.06	4.85

SMB (REV: R2)

R3 (6-September 2018)

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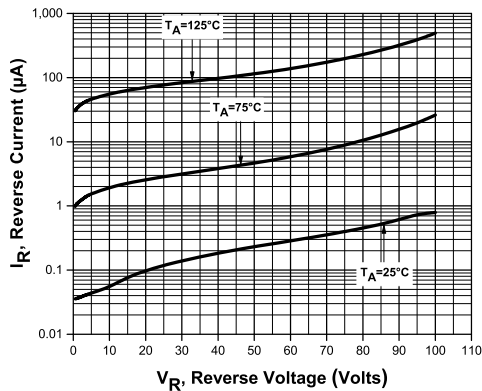
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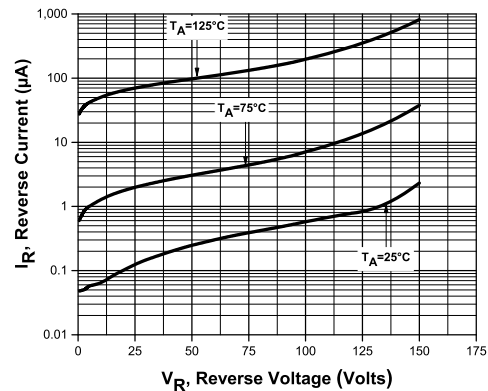


TYPICAL ELECTRICAL CHARACTERISTICS

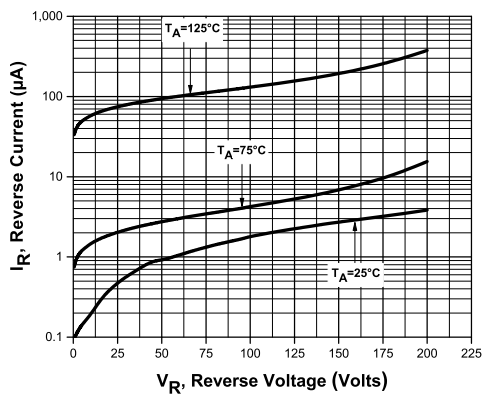
Leakage Current for CMH3-100MHV



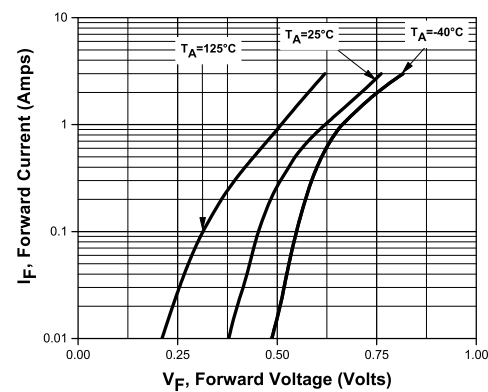
Leakage Current for CMH3-150MHV



Leakage Current for CMH3-200MHV



Forward Voltage for CMH3-100MHV



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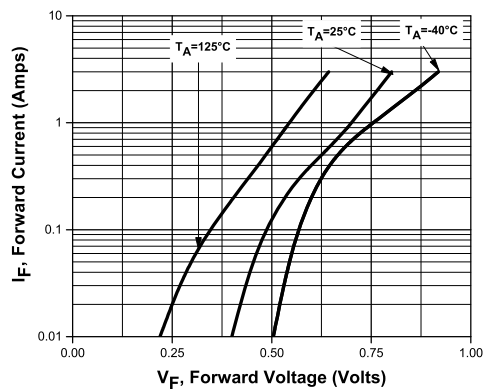
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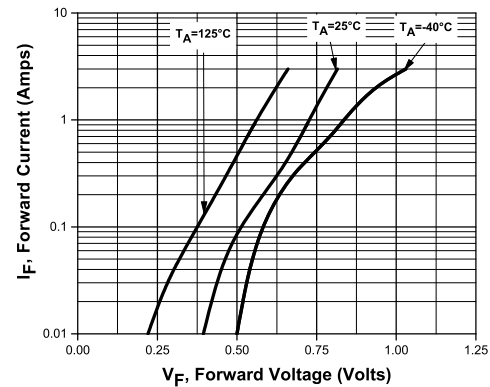


TYPICAL ELECTRICAL CHARACTERISTICS

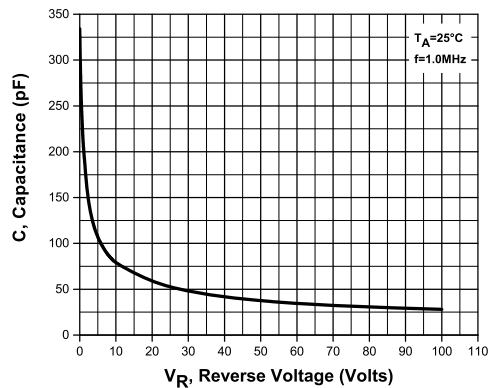
Forward Voltage for CMH3-150MHV



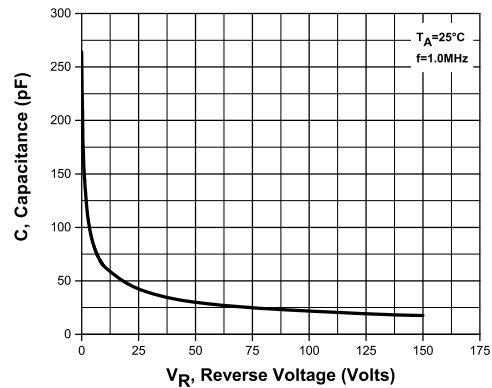
Forward Voltage for CMH3-200MHV



Capacitance for CMH3-100MHV



Capacitance for CMH3-150MHV



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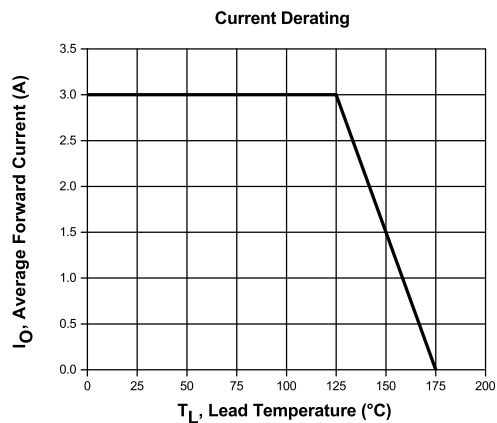
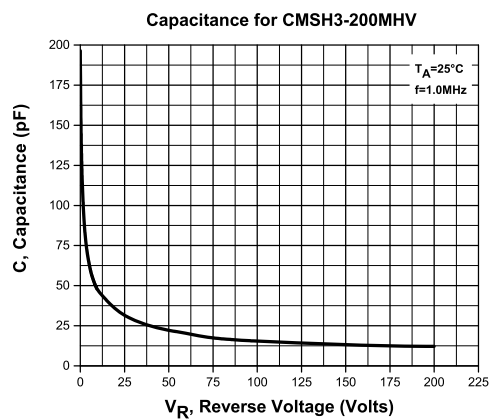
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TYPICAL ELECTRICAL CHARACTERISTICS



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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).

CONTACT US

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