



**THE DATASHEET OF
CM SH3-40 TR13 PBFREE**



CMSH3-20 CMSH3-60
 CMSH3-40 CMSH3-100

**SURFACE MOUNT SILICON
 SCHOTTKY RECTIFIERS
 3.0 AMP, 20 THRU 100 VOLT**



SMC CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSH3-20 series 3.0 Amp surface mount silicon Schottky rectifiers are highly reliable components designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications. To order devices on 16mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

FEATURES:

- High reliability
- Special selections available
- "C" bend construction provides strain relief when mounted on PC board

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

	SYMBOL	CMSH3 -20	CMSH3 -40	CMSH3 -60	CMSH3 -100	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	20	40	60	100	V
DC Blocking Voltage	V_R	20	40	60	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	28	42	71	V
Average Forward Current ($T_A=75^\circ\text{C}$)	I_O			3.0		A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}			150		A
Operating Junction Temperature	T_J		-65 to +150			$^\circ\text{C}$
Storage Temperature	T_{stg}		-65 to +175			$^\circ\text{C}$
Thermal Resistance	Θ_{JL}		10			$^\circ\text{C/W}$

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

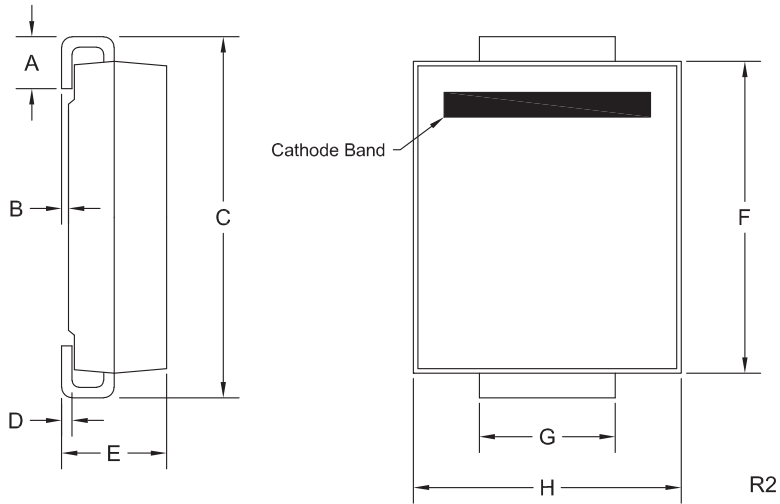
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	V_R =Rated V_{RRM}			500	μA
I_R	V_R =Rated V_{RRM} , $T_A=100^\circ\text{C}$			20	mA
V_F	$I_F=3.0\text{A}$ (CMSH3-20, -40)		0.47	0.50	V
V_F	$I_F=3.0\text{A}$ (CMSH3-60)		0.56	0.70	V
V_F	$I_F=3.0\text{A}$ (CMSH3-100)		0.75	0.80	V
C_J	$V_R=0$, $f=1.0\text{MHz}$ (CMSH3-20)		511		pF
C_J	$V_R=0$, $f=1.0\text{MHz}$ (CMSH3-40)		510		pF
C_J	$V_R=0$, $f=1.0\text{MHz}$ (CMSH3-60)		278		pF
C_J	$V_R=0$, $f=1.0\text{MHz}$ (CMSH3-100)		320		pF

CMSH3-20 CMSH3-60
 CMSH3-40 CMSH3-100



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SMC CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMSH3-20	CS320
CMSH3-40	CS340
CMSH3-60	CS360
CMSH3-100	CS3100

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.002	0.008	0.05	0.20
C	0.305	0.320	7.75	8.13
D	0.006	0.012	0.15	0.31
E	0.079	0.103	2.00	2.62
F	0.260	0.280	6.60	7.11
G	0.108	0.128	2.75	3.25
H	0.220	0.245	5.59	6.22

SMC (REV: R2)

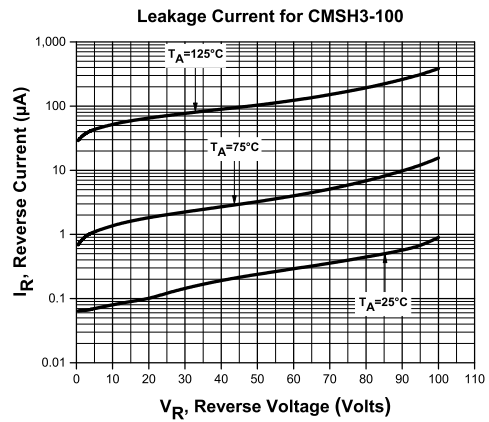
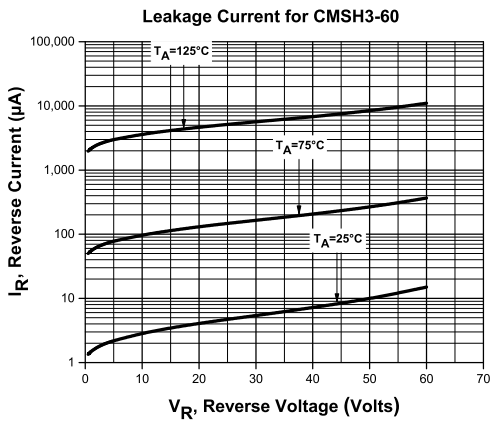
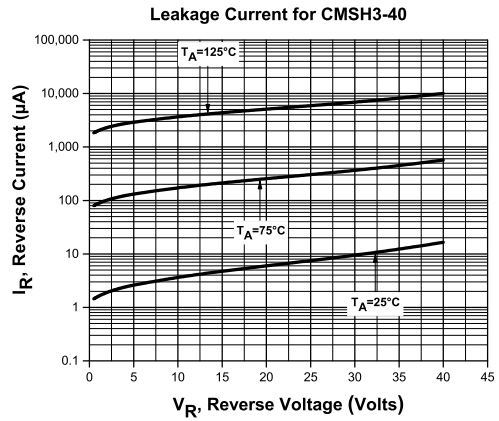
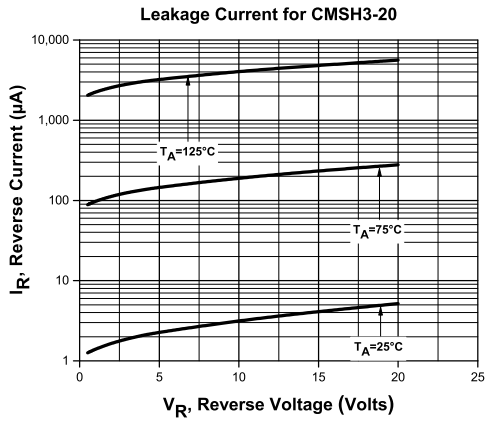
R6 (5-January 2016)

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TYPICAL ELECTRICAL CHARACTERISTICS



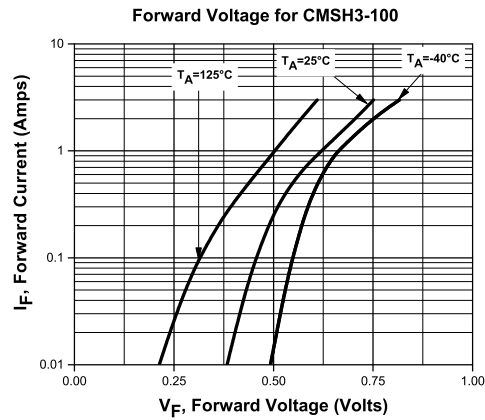
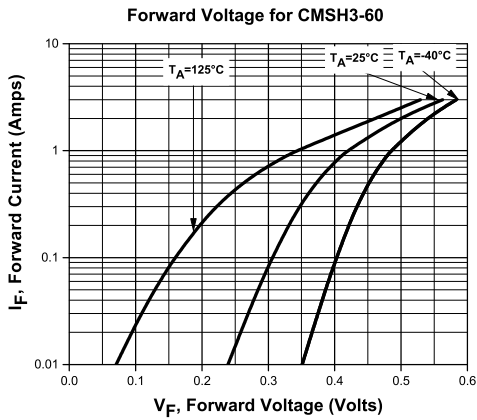
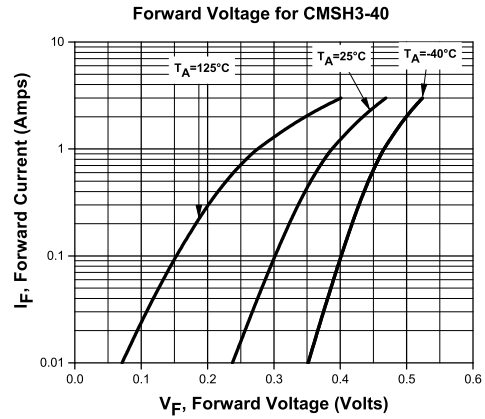
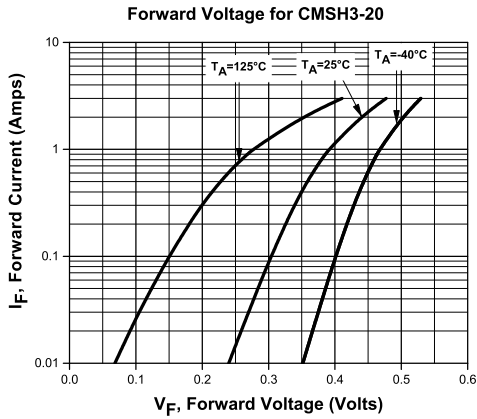
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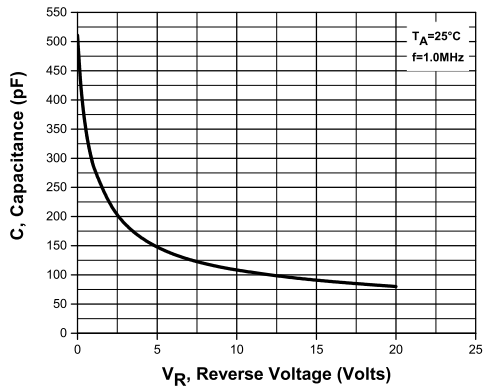
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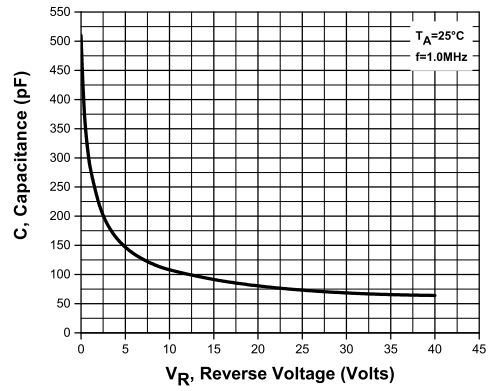


TYPICAL ELECTRICAL CHARACTERISTICS

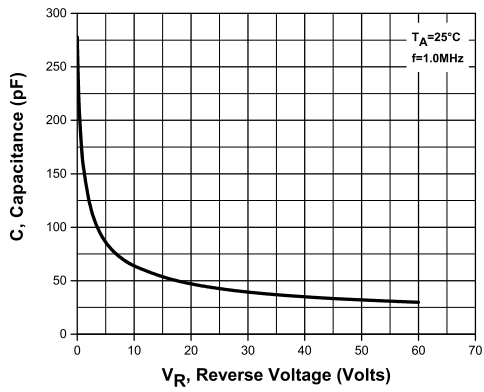
Capacitance for CMSH3-20



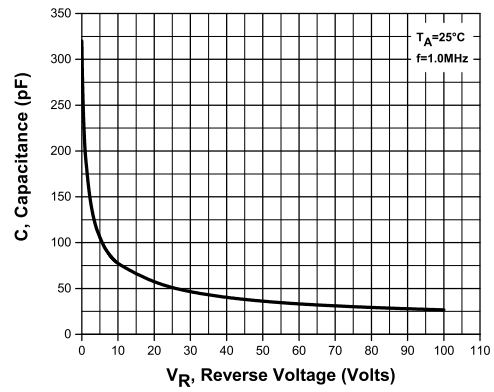
Capacitance for CMSH3-40



Capacitance for CMSH3-60



Capacitance for CMSH3-100



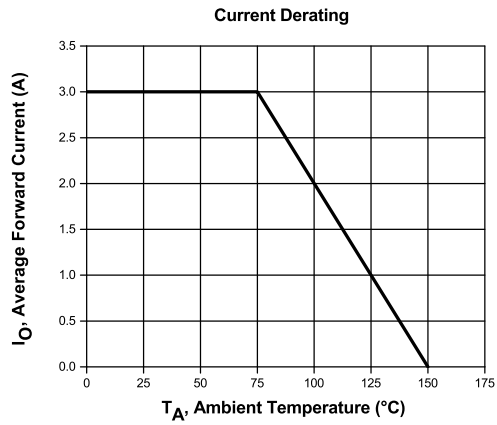
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TYPICAL ELECTRICAL CHARACTERISTICS



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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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- [Central Semiconductor Corp Information](#)

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- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management