CMSH3-100MFL
CMSH3-150MFL
CMSH3-200MFL

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

SMAFL CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSH3-100MFL, CMSH3-150MFL and CMSH3-200MFL are extremely efficient, high voltage, silicon Schottky rectifiers with low total conduction losses and packaged in the low profile SMAFL surface mount case. The SMAFL fits on the existing industry standard SMA mounting pad layouts.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

APPLICATIONS:

- Reverse polarity protection
- Voltage clamping
- DC-DC output rectification
- Power management

FEATURES:

- High current capability (3.0A)
- Low leakage current
- Low forward voltage
- Low package profile (1.0mm)
- Flammability classification UL94V-0

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

	SYMBOL	CMSH3 -100MFL	CMSH3 -150MFL	CMSH3 -200MFL	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=110°C)	I_O		3.0		A
Peak Forward Surge Current, tp=8.3ms	I_{FSM}		80		A
Operating and Storage Junction Temperature	T_J, T_{stg}		-65 to +150		°C
Thermal Resistance	Θ_{JL}		20		°C/W

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	V_R=Rated V_{RRM}		50	μA
V_F	I_F=3.0A (CMSH3-100MFL)	0.76	0.80	V
V_F	I_F=3.0A (CMSH3-150MFL)	0.81	0.90	V
V_F	I_F=3.0A (CMSH3-200MFL)	0.85	0.90	V
C_J	V_R=4.0V, f=1.0MHz (CMSH3-100MFL)	110		pF
C_J	V_R=4.0V, f=1.0MHz (CMSH3-150MFL)	90		pF
C_J	V_R=4.0V, f=1.0MHz (CMSH3-200MFL)	70		pF

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CMSH3-200MFL

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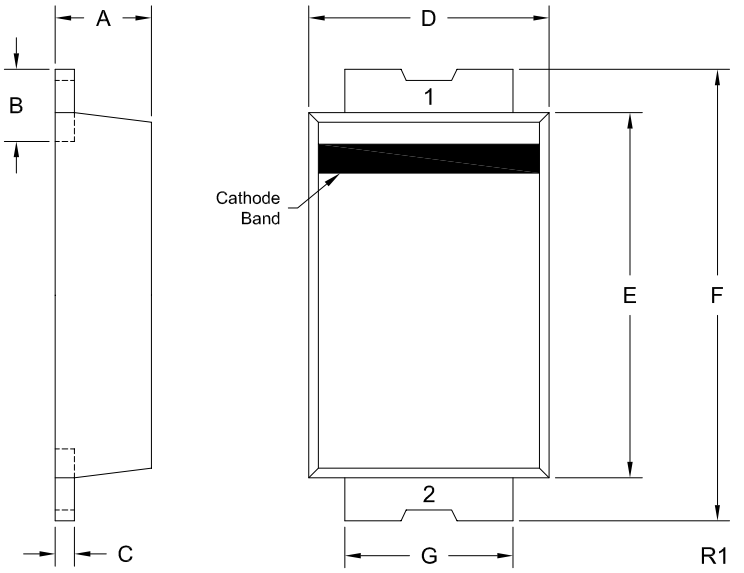
SMAFL CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMSH3-100MFL	CS310MFL
CMSH3-150MFL	CS315MFL
CMSH3-200MFL	CS320MFL

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.035	0.044	0.90	1.10
B	0.021	0.038	0.55	0.95
C	0.006	0.010	0.15	0.25
D	0.094	0.103	2.40	2.60
E	0.145	0.154	3.70	3.90
F	0.177	0.193	4.50	4.90
G	0.065	0.073	1.65	1.85

SMAFL (REV: R1)

LEAD CODE:
1) Cathode
2) Anode

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CMSH3-200MFL

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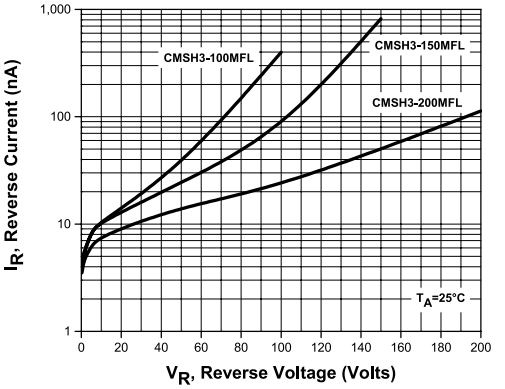
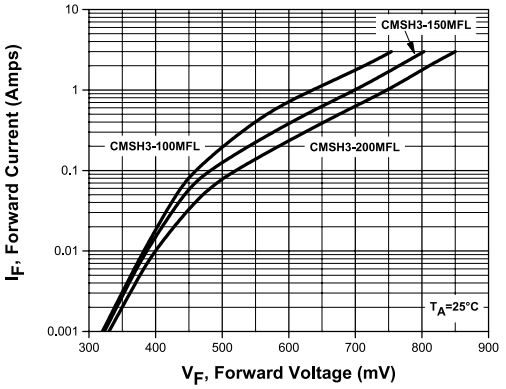
TYPICAL ELECTRICAL CHARACTERISTICS

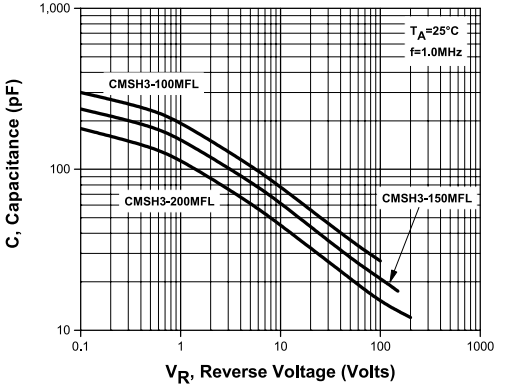
Leakage Current



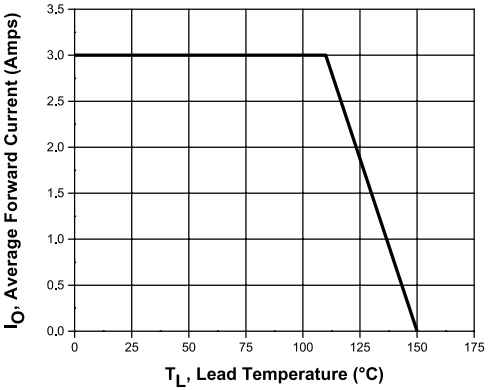
Forward Voltage



Capacitance



Current Derating



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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