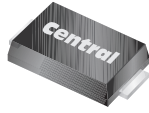


CMSH3-100MFL  
 CMSH3-150MFL  
 CMSH3-200MFL

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



**SMAFL CASE**



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

**FEATURES:**

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

**APPLICATIONS:**

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

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

	<b>SYMBOL</b>	<b>CMSH3 -100MFL</b>	<b>CMSH3 -150MFL</b>	<b>CMSH3 -200MFL</b>	<b>UNITS</b>
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 ( $T_L=110^\circ\text{C}$ )	$I_O$		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 +150		$^\circ\text{C}$
Thermal Resistance	$\theta_{JL}$		20		$^\circ\text{C/W}$

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

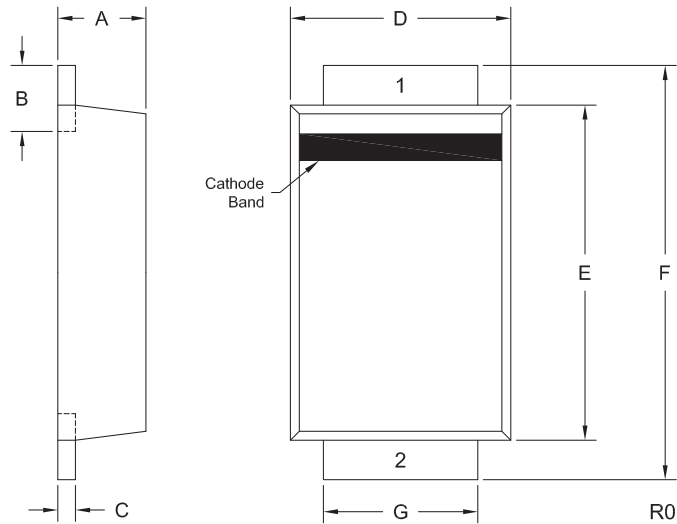
<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=\text{Rated } V_{RRM}$		50	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$		20	mA
$V_F$	$I_F=3.0\text{A}$ (CMSH3-100MFL)	0.76	0.80	V
$V_F$	$I_F=3.0\text{A}$ (CMSH3-150MFL)	0.81	0.90	V
$V_F$	$I_F=3.0\text{A}$ (CMSH3-200MFL)	0.85	0.90	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$ (CMSH3-100MFL)	110		pF
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$ (CMSH3-150MFL)	90		pF
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$ (CMSH3-200MFL)	70		pF

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



**SURFACE MOUNT SILICON  
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 3.0 AMP, 100 THRU 200 VOLT**

**SMAFL CASE - MECHANICAL OUTLINE**



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

SYMBOL	INCHES		MILLIMETERS	
	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: R0)

**LEAD CODE:**

- 1) Cathode
- 2) Anode

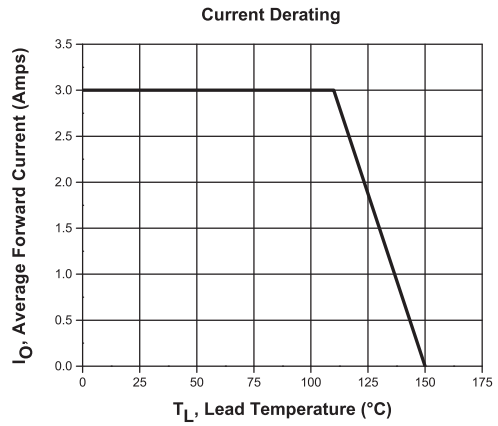
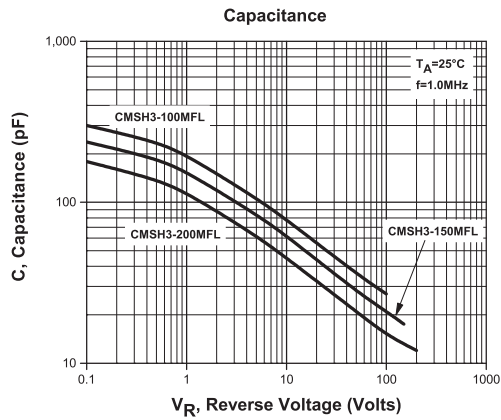
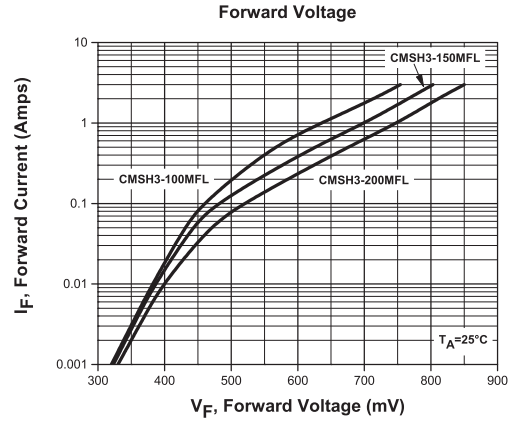
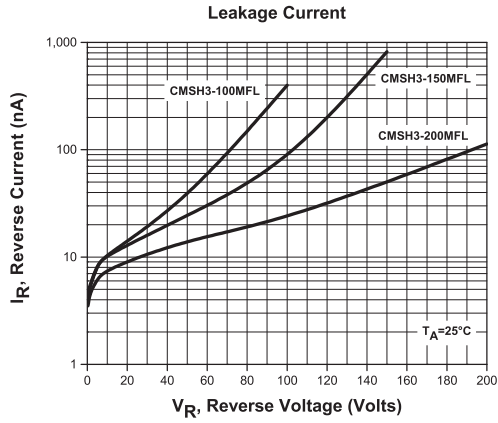
R2 (22-February 2013)

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



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

TYPICAL ELECTRICAL CHARACTERISTICS



R2 (22-February 2013)