

CMSH2-40FL

SURFACE MOUNT  
SILICON SCHOTTKY RECTIFIER  
2 AMP, 40 VOLTS



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**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH2-40FL is an extremely efficient silicon Schottky rectifier with low total conduction losses packaged in the low profile SMAFL case. The SMAFL fits on existing industry standard SMA mounting pad layouts.

**MARKING CODE: C240FL**



SMAFL CASE

**APPLICATIONS:**

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

**FEATURES:**

- High current capability (2.0A)
- Low leakage current (100µA MAX @ 40V)
- Low forward voltage (0.5V MAX @ 2.0A)
- Low package profile (1.0mm)
- Flammability classification UL94V-0

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

	<b>SYMBOL</b>	<b>UNITS</b>
Peak Repetitive Reverse Voltage	$V_{RRM}$	V
DC Blocking Voltage	$V_R$	V
RMS Reverse Voltage	$V_{R(RMS)}$	V
Average Forward Current ( $T_L=125^\circ\text{C}$ )	$I_O$	A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	$I_{FSM}$	A
Operating and Storage Junction Temperature	$T_J, T_{stg}$	${}^\circ\text{C}$
Thermal Resistance	$\Theta_{JL}$	${}^\circ\text{C}/\text{W}$

**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>
$I_R$	$V_R=40\text{V}$	30	100	$\mu\text{A}$
$V_F$	$I_F=2.0\text{A}$	0.38	0.50	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	100		pF

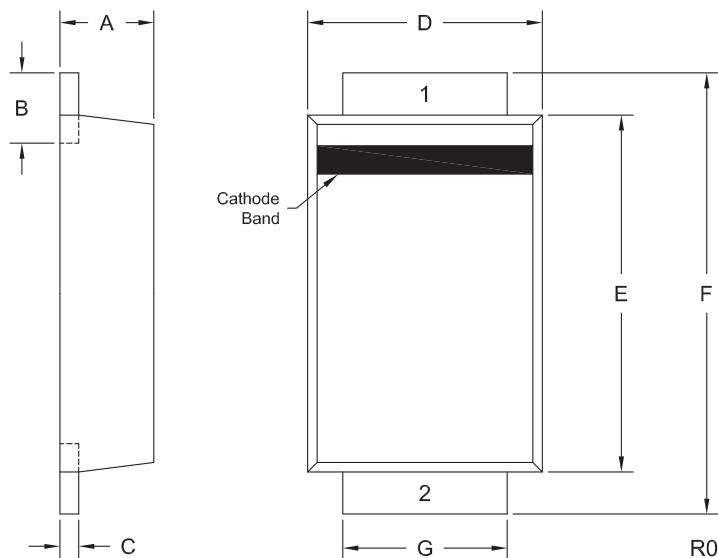
R2 (25-June 2012)

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SMAFL CASE - MECHANICAL OUTLINE



**LEAD CODE:**

- 1) Cathode
- 2) Anode

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SYMBOL	DIMENSIONS			
	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)

R2 (25-June 2012)

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