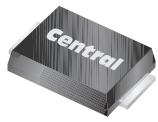


CMSH5-40FL

**SURFACE MOUNT SILICON  
SCHOTTKY RECTIFIER  
5.0 AMP, 40 VOLT**



**SMBFL CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH5-40FL is an extremely efficient silicon Schottky rectifier with low total conduction losses packaged in the low profile SMBFL case. The SMBFL fits on existing industry standard SMB mounting pad layouts.

**MARKING CODE: CS540FL**

**FEATURES:**

- High current capability (5.0A)
- Low leakage current (50 $\mu$ A TYP @ 40V)
- Low forward voltage (0.44V TYP @ 5.0A)
- Low package profile
- 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>UNITS</b>
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
DC Blocking Voltage	$V_R$	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Forward Current ( $T_L=125^\circ\text{C}$ )	$I_O$	5.0	A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	$I_{FSM}$	100	A
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JL}$	19	$^\circ\text{C/W}$

**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>
$I_R$	$V_R=40\text{V}$	50	100	$\mu\text{A}$
$V_F$	$I_F=5.0\text{A}$	0.44	0.46	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	390		pF

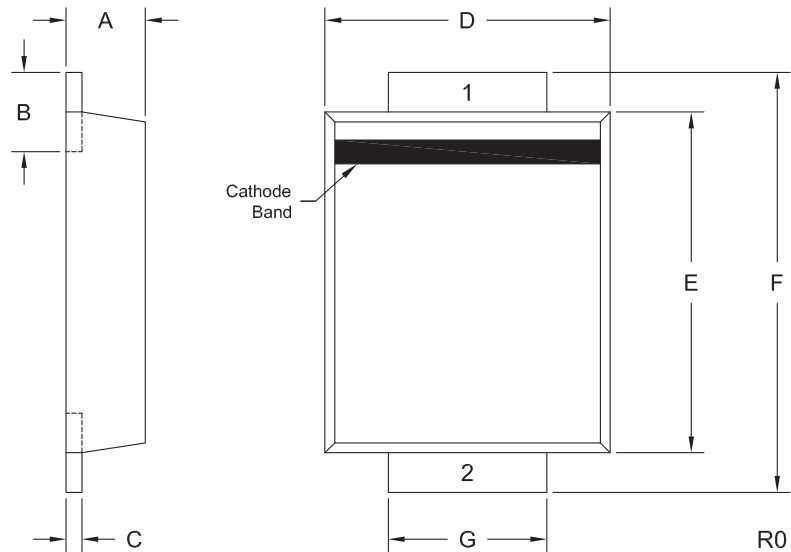
R1 (4-February 2013)

CMSH5-40FL

SURFACE MOUNT SILICON  
SCHOTTKY RECTIFIER  
5.0 AMP, 40 VOLT



SMBFL CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: CS540FL

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.035	0.044	0.90	1.10
B	0.031	0.048	0.80	1.20
C	0.006	0.010	0.15	0.25
D	0.137	0.146	3.50	3.70
E	0.161	0.178	4.10	4.50
F	0.200	0.217	5.10	5.50
G	0.074	0.083	1.90	2.10

SMBFL (REV: R0)

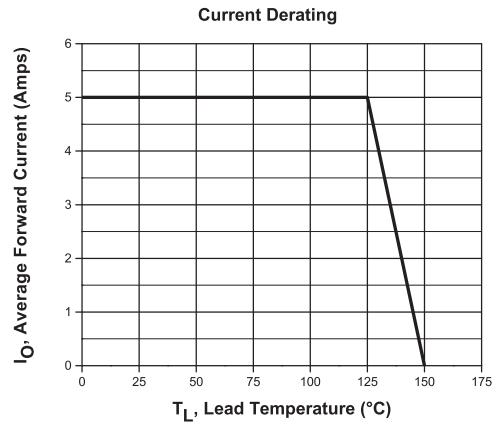
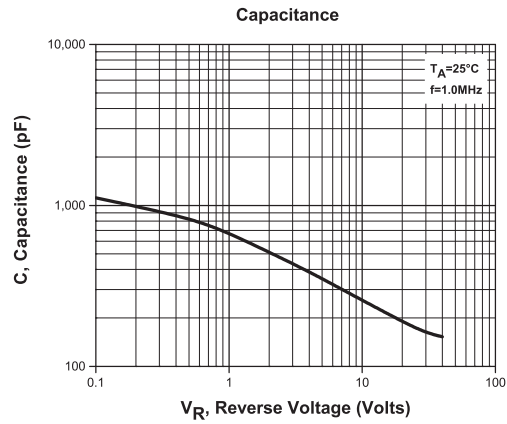
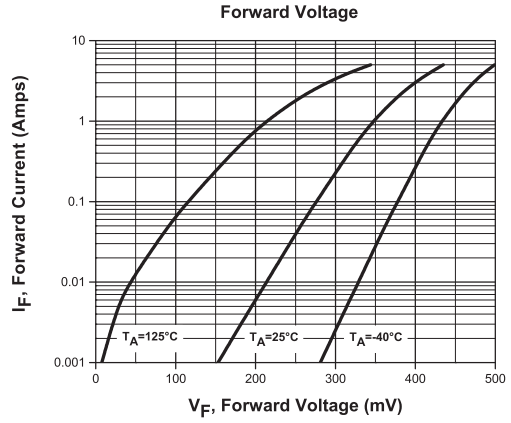
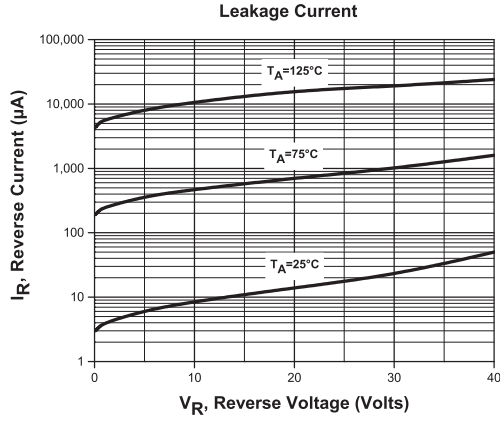
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CMSH5-40FL

SURFACE MOUNT SILICON  
SCHOTTKY RECTIFIER  
5.0 AMP, 40 VOLT



TYPICAL ELECTRICAL CHARACTERISTICS



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