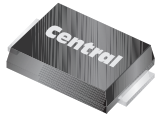


CMSH5-40FL

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



SMBFL CASE



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 μ 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)

	SYMBOL		UNITS
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	θ_{JL}	19	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=40\text{V}$	50	100	μA
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

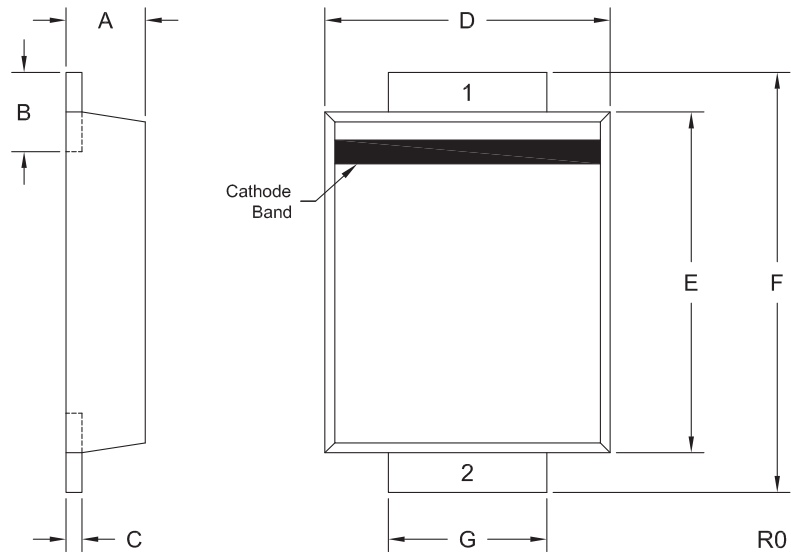
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SMBFL CASE - MECHANICAL OUTLINE



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)

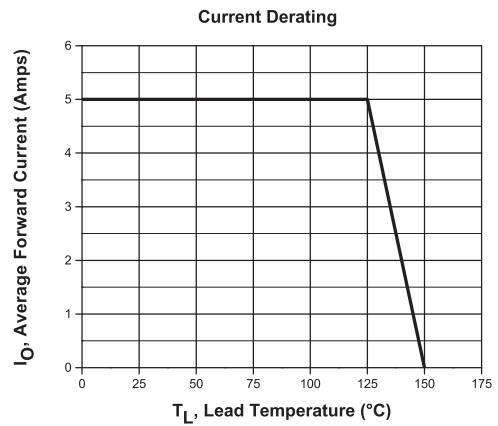
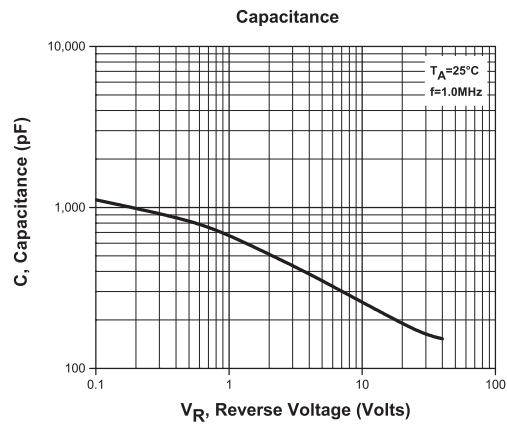
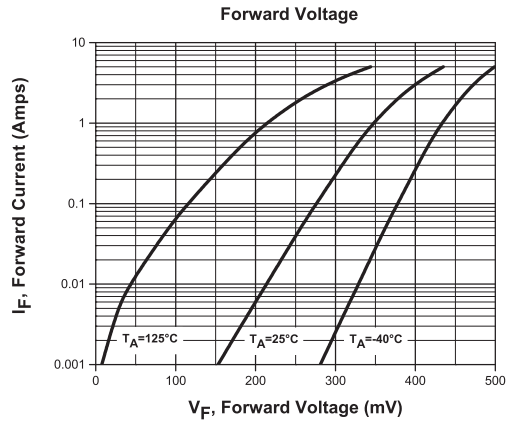
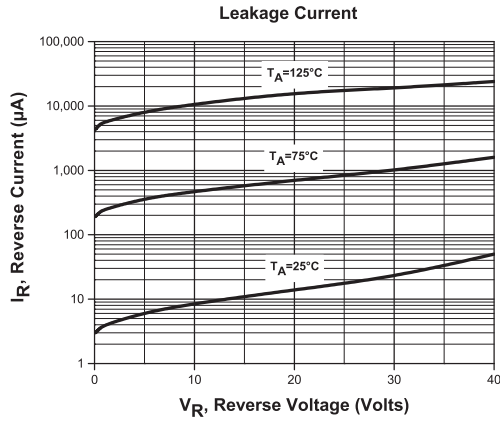
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5.0 AMP, 40 VOLT



TYPICAL ELECTRICAL CHARACTERISTICS



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