

CMSH2-40FL

SURFACE MOUNT SILICON
SCHOTTKY RECTIFIER
2.0 AMP, 40 VOLT



SMAFL CASE



www.centrasemi.com

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

APPLICATIONS:

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

FEATURES:

- High current capability (2.0A)
- Low leakage current (100 μ A 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)

	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	2.0	A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}	50	A
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	θ_{JL}	20	$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=40\text{V}$	30	100	μA
V_F	$I_F=2.0\text{A}$	0.48	0.50	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$	100		pF

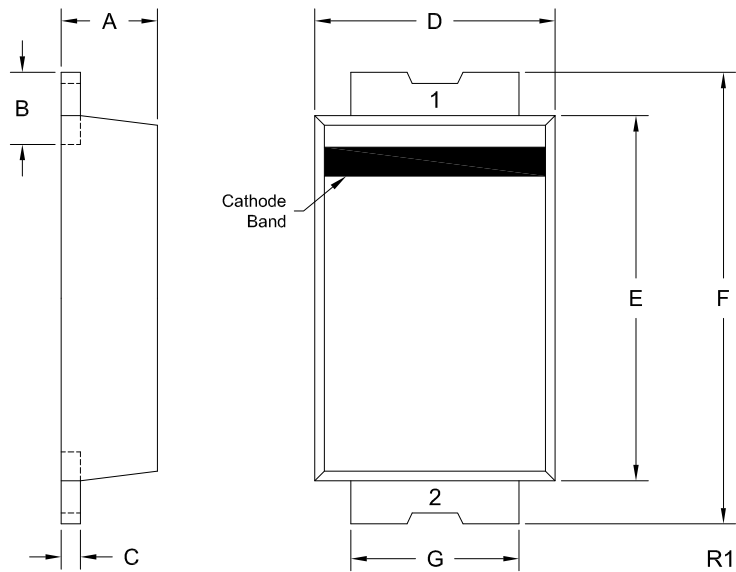
R4 (28-June 2021)

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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: R1)

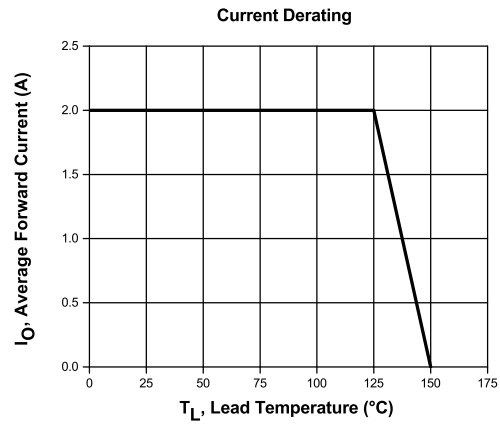
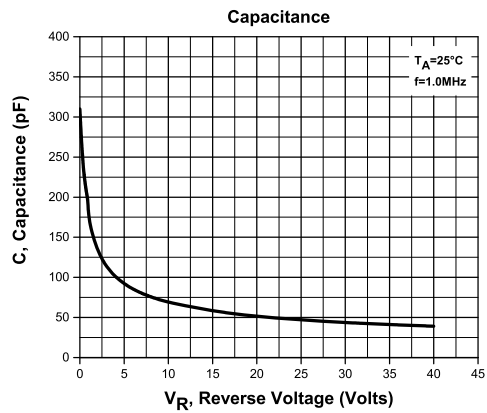
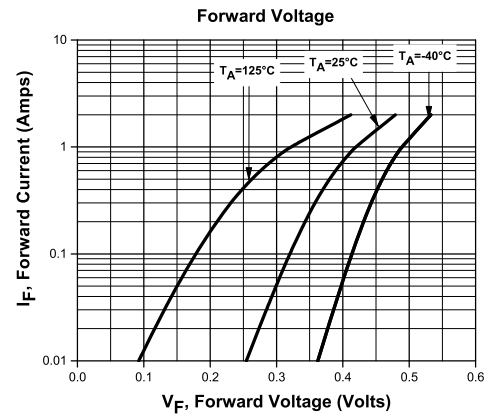
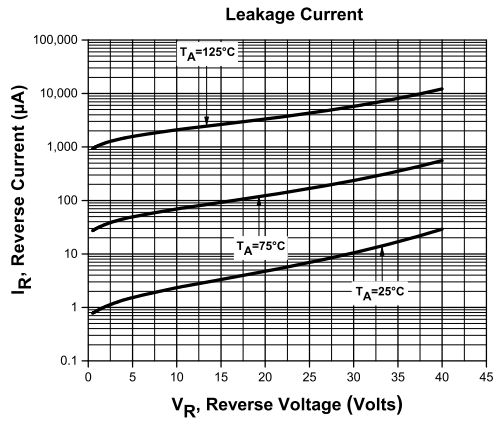
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TYPICAL ELECTRICAL CHARACTERISTICS



R4 (28-June 2021)

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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