

**CMIDSH1-3**  
**SURFACE MOUNT**  
**LOW  $V_F$**   
**SILICON SCHOTTKY RECTIFIER**  
**1 AMP, 30 VOLTS**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMIDSH1-3 is a silicon Schottky rectifier packaged in a space saving flat lead, low profile SOD-323FL case. This SUPERmini™ device has been designed for applications requiring a low forward voltage drop.

**MARKING CODE: C13**

**APPLICATIONS:**

- DC-DC converters
- Voltage clamping
- Reverse polarity protection
- General purpose rectification

**FEATURES:**

- Low package profile
- High surge capability
- Low leakage current

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

Peak Repetitive Reverse Voltage  
Average Forward Current ( $T_L=110^\circ\text{C}$ )  
Peak Forward Surge Current,  $t_p=8.3\text{ms}$   
Operating and Storage Junction Temperature  
Thermal Resistance (Note 1)

**SYMBOL**

SYMBOL		UNITS
$V_{RRM}$	30	V
$I_O$	1.0	A
$I_{FSM}$	22	A
$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
$\Theta_{JA}$	405	$^\circ\text{C/W}$

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

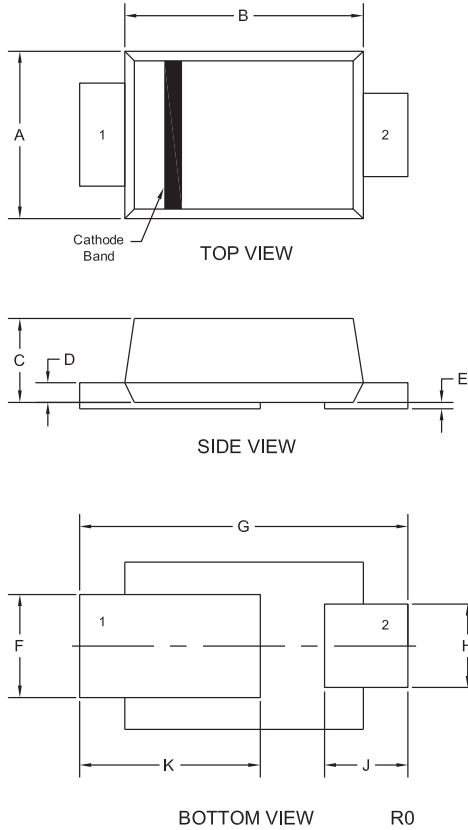
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	$V_R=30\text{V}$	25	100	$\mu\text{A}$
$V_F$	$I_F=0.7\text{A}$	0.41	0.45	V
$V_F$	$I_F=1.0\text{A}$	0.44	0.52	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	70		pF

Notes: (1) FR-4 epoxy PCB with minimum copper pad area.

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**SOD-323FL CASE - MECHANICAL OUTLINE**



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.047	0.055	1.20	1.40
B	0.068	0.077	1.75	1.95
C	0.021	0.030	0.55	0.75
D	0.004	0.008	0.10	0.20
E	-	0.004	-	0.10
F	0.025	0.038	0.65	0.95
G	0.090	0.107	2.30	2.70
H	0.017	0.030	0.45	0.75
J	0.015	0.032	0.40	0.80
K	0.045	0.061	1.15	1.55

SOD-323FL (REV:R0)

**LEAD CODE:**

- 1) Cathode
- 2) Anode

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R2 (2-August 2012)