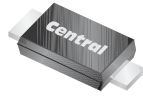


CMIDSH1-4
CMIDSH1-6

SURFACE MOUNT
LOW V_F
SILICON SCHOTTKY RECTIFIER
1 AMP, 40 AND 60 VOLTS

SUPERmini™



SOD-323FL CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMIDSH1-4 and CMIDSH1-6 are silicon Schottky rectifiers packaged in a space saving flat lead, low profile SOD-323FL case. These SUPERmini™ devices have been designed for applications requiring a low forward voltage drop.

MARKING CODES: CMIDSH1-4: C14
CMIDSH1-6: C16

APPLICATIONS:

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

FEATURES:

- Low package profile
- High reverse voltage 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	CMIDSH1-4	CMIDSH1-6	UNITS
V_{RRM}	40	60	V
I_O		1.0	A
I_{FSM}		20	A
T_J, T_{stg}	-65 to +150		$^\circ\text{C}$
Θ_{JA}	405		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	CMIDSH1-4		CMIDSH1-6		UNITS
		TYP	MAX	TYP	MAX	
I_R	$V_R=\text{Rated } V_{RRM}$	10	100	20	100	μA
V_F	$I_F=0.7\text{A}$	0.43	0.52	0.48	0.58	V
V_F	$I_F=1.0\text{A}$	0.46	0.58	0.53	0.68	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$	51	-	45	-	pF

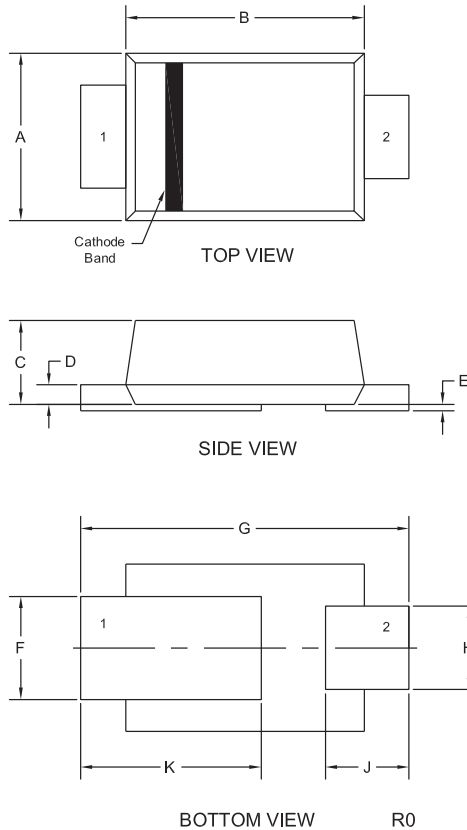
Notes: (1) FR-4 epoxy PCB with minimum copper pad area.

CMIDSH1-4
CMIDSH1-6

SURFACE MOUNT
LOW V_F
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SOD-323FL CASE - MECHANICAL OUTLINE



DIMENSIONS				
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

MARKING CODES: CMIDSH1-4: C14
CMIDSH1-6: C16

R2 (20-April 2012)