

CMP SH1-4L
SURFACE MOUNT
HIGH CURRENT
ULTRA LOW V_F
SILICON SCHOTTKY RECTIFIER



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMP SH1-4L is a high current, ultra low V_F , Schottky Rectifier in a surface mount SOT-23F package. It is suitable for all applications requiring a high current, small sized, operationally efficient Schottky rectifier.

MARKING CODE: CSL

APPLICATIONS:

- Load/Power Switches
- Power Supply Converter Circuits
- Battery powered equipment including Cell Phones, Digital Cameras, Pagers, PDAs, etc.

FEATURES:

- Current ($I_F=1.0A$)
- Low Forward Voltage Drop ($V_F=0.39V$ MAX @ 1.0A)
- Low Reverse Current (150 μA TYP @ $V_R=20V$)
- Small, surface mount, power SOT-23F package

MAXIMUM RATINGS: ($T_A=25^\circ C$)

Continuous Reverse Voltage
 Average Forward Current
 Peak Forward Surge Current, $t_p=8.3ms$
 Power Dissipation
 Operating and Storage Junction Temperature
 Thermal Resistance

SYMBOL		UNITS
V_R	40	V
I_O	1.0	A
I_{FSM}	20	A
P_D	350	mW
T_J, T_{stg}	-65 to +125	$^\circ C$
θ_{JA}	286	$^\circ C/W$

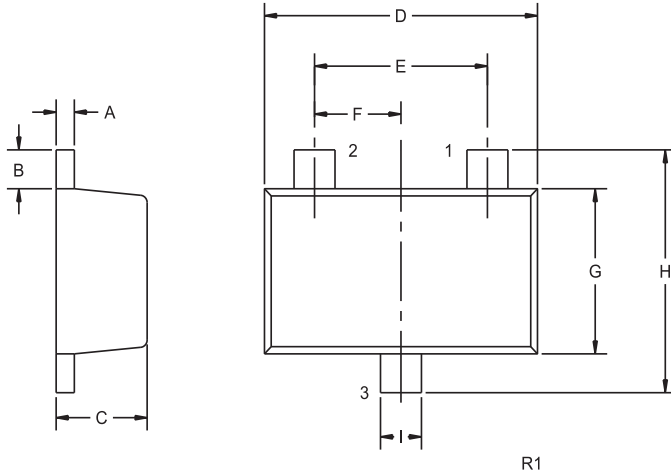
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ C$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=20V$		150	900	μA
I_R	$V_R=30V$		0.25	1.5	mA
BV_R	$I_R=1.0mA$	40			V
V_F	$I_F=100mA$		230	270	mV
V_F	$I_F=500mA$		300	340	mV
V_F	$I_F=1.0A$		340	390	mV
V_F	$I_F=1.5A$		390	420	mV
C_T	$V_R=10V, f=1.0MHz$		50		pF

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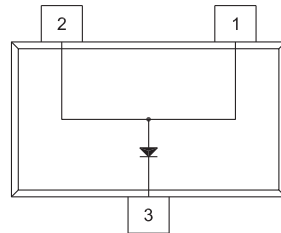
SOT-23F CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.008	0.10	0.20
B	0.012	0.020	0.30	0.50
C	0.031	0.039	0.80	1.00
D	0.110	0.118	2.80	3.00
E	0.075		1.90	
F	0.037		0.95	
G	0.059	0.067	1.50	1.70
H	0.091	0.098	2.30	2.50
I	0.014	0.018	0.35	0.45

SOT-23F (REV: R1)

PIN CONFIGURATION



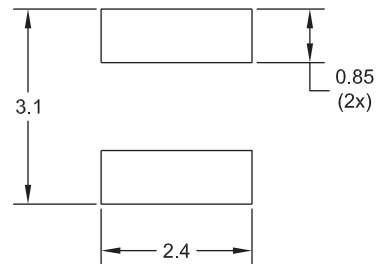
LEAD CODE:

- 1) Anode
- 2) Anode
- 3) Cathode

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OPTIONAL MOUNTING PADS

(Dimensions in mm)



R0

(For standard mounting pads see SOT-23F Package Details)

R3 (27-January 2010)