



CMPSH1-4LE

**SURFACE MOUNT
SILICON HIGH CURRENT
LOW V_F , LOW LEAKAGE
SCHOTTKY BARRIER RECTIFIER**

**POWER
23**

**SUB ONE
CERTIFIED**



SOT-23F CASE

CentralTM Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPSH1-4LE is an Enhanced high current, low leakage, low V_F , Schottky Barrier Rectifier in a surface mount SOT-23F package. It is suitable for all applications requiring premium performance in a small sized, high current Schottky rectifier that offers both very low V_F and leakage current specifications.

MARKING CODE: CSE

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 Peak Forward Current
Non Repetitive Forward Current ($t_p=8.3ms$)
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_R 40
 I_O 1.0
 I_{FSM} 20
 P_D 350
 T_J, T_{stg} -65 to +125
 Θ_{JA} 286

UNITS

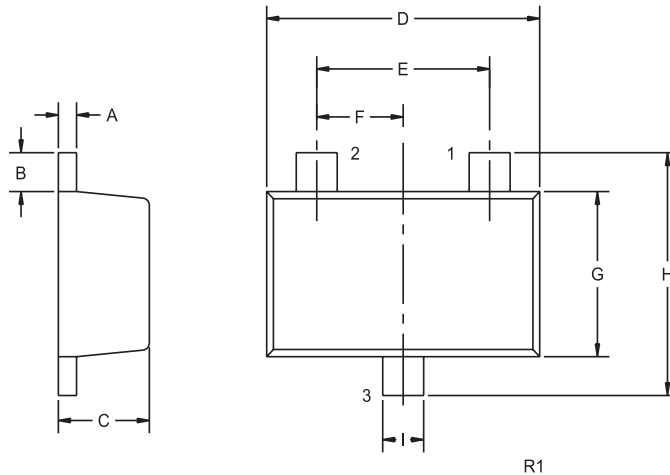
V
A
A
mW
 $^\circ C$
 $^\circ C/W$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=5.0V$		60	200	μA
I_R	$V_R=10V$		85	300	μA
I_R	$V_R=20V$		150	500	μA
I_R	$V_R=30V$		250	800	μA
I_R	$V_R=40V$		350	900	μA
BV_R	$I_R=1.0mA$	40			V
V_F	$I_F=100mA$			300	mV
V_F	$I_F=500mA$			350	mV
V_F	$I_F=1.0A$			400	mV
V_F	$I_F=1.5A$			450	mV
C_T	$V_R=10V, f=1.0MHz$		50		pF

R2 (30-September 2008)

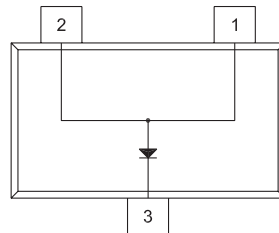
SOT-23F CASE - MECHANICAL OUTLINE



DIMENSIONS				
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

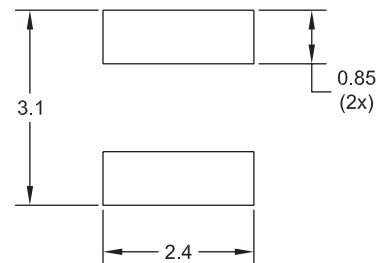


LEAD CODE:

- 1) ANODE
- 2) ANODE
- 3) CATHODE

MARKING CODE: CSE

OPTIONAL MOUNTING PADS



R0

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