

CMP5H1-4
SURFACE MOUNT
HIGH CURRENT SCHOTTKY
BARRIER SILICON RECTIFIER



SOT-23F CASE

CentralTM

Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor CMP5H1-4 is a High Current, Schottky Barrier Rectifier in a surface mount SOT-23F package suitable for high current applications in mobile communications and DC-DC converters.

MARKING CODE: SH1

FEATURES:

- HIGH CURRENT (1AMP)
- POWER SOT-23F PACKAGE

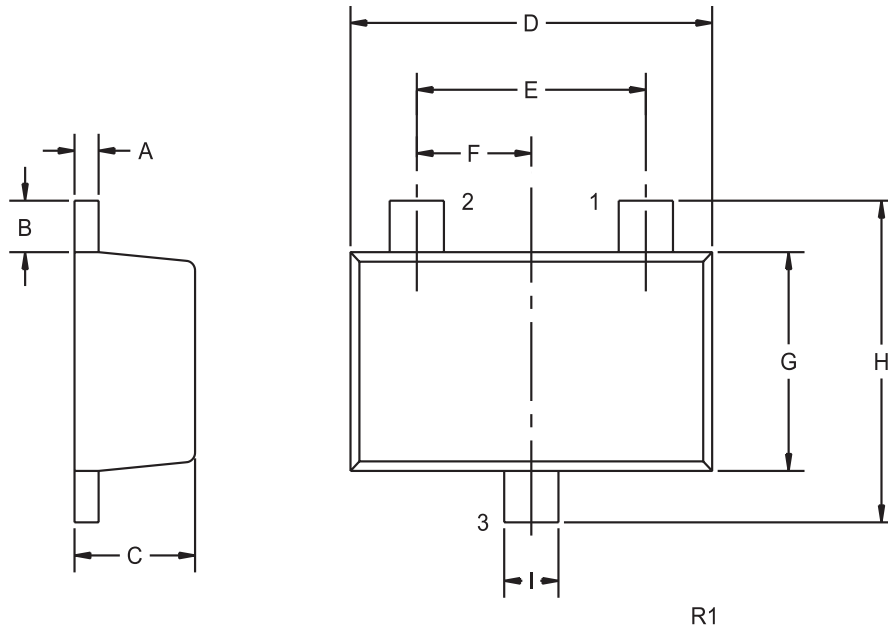
MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	40	V
Forward Current	I_F	1.0	A
Average Peak Forward Current	I_O	1.75	A
Non Repetitive Forward Current $\leq 100\mu\text{s}$ $\leq 10\text{ms}$	I_{FSM}	12	A
Power Dissipation	P_D	5.2	A
Operating and Storage		350	mW
Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	357	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=30\text{V}$			100	μA
BV_R	$I_R=100\mu\text{A}$	40			V
V_F	$I_F=100\text{mA}$			390	mV
V_F	$I_F=500\text{mA}$			480	mV
V_F	$I_F=1.0\text{A}$			550	mV
V_F	$I_F=1.5\text{A}$			620	mV
V_F	$I_F=1.0\text{A}, @ T_A=100^\circ\text{C}$		420		mV
C_T	$V_R=25, f=1.0\text{MHz}$		25		pF
t_{rr}	$I_F=500\text{mA}, I_R=500\text{mA}, I_{rr}=50\text{mA}$		12		ns

SOT-23F CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) ANODE
- 2) N/C
- 3) CATHODE

MARKING CODE: SH1

SYMBOL	DIMENSIONS			
	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)