

CMHSH5-4
SURFACE MOUNT
SCHOTTKY RECTIFIER
500mA, 40 VOLTS



SOD-123 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMHSH5-4 type is a Silicon Schottky Rectifier, epoxy molded in a surface mount package, designed for high current, fast switching applications requiring a low forward voltage drop.

The Marking Code is C54.

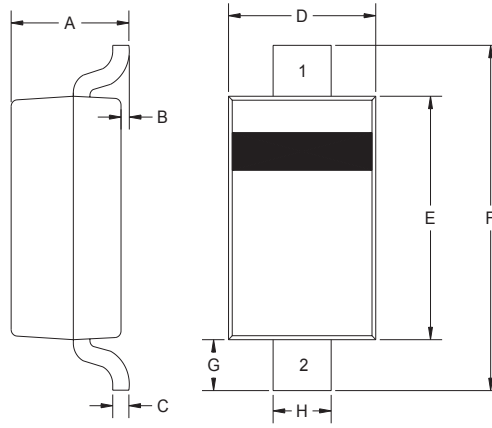
MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

	<u>SYMBOL</u>		<u>UNITS</u>
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Peak Working Reverse Voltage	V_{RWM}	40	V
DC Blocking Voltage	V_R	40	V
Average Rectified Current	I_O	500	mA
Peak Repetitive Forward Current (@ rated V_R , square wave, 20kHz, $T_C=115^\circ\text{C}$)	I_{FRM}	1.0	A
Peak Forward Surge Current (@ rated load, halfwave, single phase, 60Hz)	I_{FSM}	5.5	A
Junction Temperature	T_J	-65 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	Θ_{JL}	118	$^\circ\text{C/W}$
Thermal Resistance	Θ_{JA}	206	$^\circ\text{C/W}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
I_R	$V_R=20\text{V}$			10	μA
I_R	$V_R=20\text{V}, T_A=100^\circ\text{C}$			5.0	mA
I_R	$V_R=40\text{V}$			20	μA
I_R	$V_R=40\text{V}, T_A=100^\circ\text{C}$			13	mA
V_F	$I_F=500\text{mA}$			510	mV
V_F	$I_F=500\text{mA}, T_A=100^\circ\text{C}$			460	mV
V_F	$I_F=1.0\text{A}$			620	mV
V_F	$I_F=1.0\text{A}, T_A=100^\circ\text{C}$			610	mV
C_T	$V_R=4.0\text{V}, f=1.0\text{MHz}$		50		pF

MECHANICAL OUTLINE - SOD-123



R3

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.053	0.95	1.35
B	-	0.005	-	0.12
C	-	0.008	-	0.20
D	0.055	0.071	1.40	1.80
E	0.098	0.112	2.50	2.84
F	0.140	0.154	3.55	3.90
G	0.010	-	0.25	-
H	0.020	0.028	0.50	0.70

SOD-123 (REV:R3)

Lead Code:

- 1) Cathode**
- 2) Anode**

The Marking Code is C54.

R2 (2-November 2001)