

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.

MARKING CODE: C54

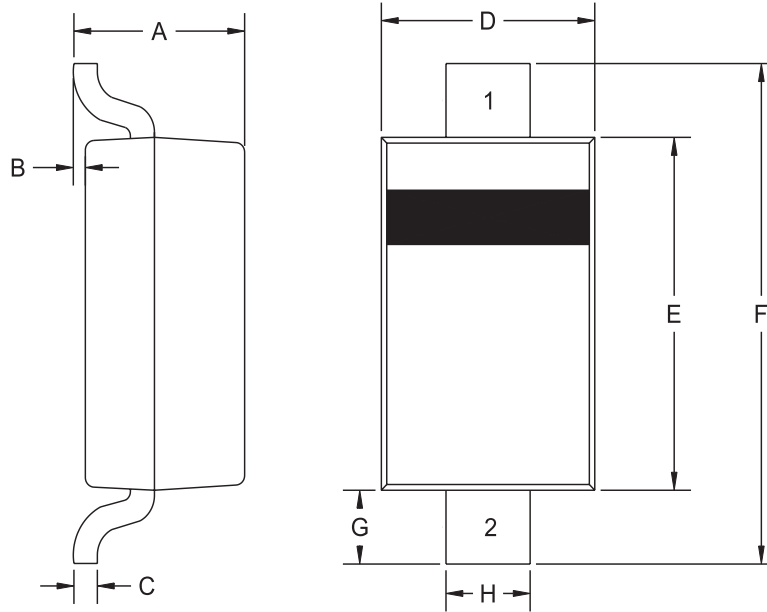
MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL		UNITS
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 Resistanc	θ_{JA}	206	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=20\text{V}$			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

SOD-123 CASE - MECHANICAL OUTLINE



R4

LEAD CODE:

1) CATHODE

2) ANODE

MARKING CODE: C54

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.053	0.95	1.35
B	0.000	0.005	0.00	0.12
C	-	0.008	-	0.20
D	0.055	0.071	1.40	1.80
E	0.098	0.110	2.50	2.80
F	0.142	0.154	3.60	3.90
G	0.016	-	0.40	-
H	0.020	0.028	0.50	0.70

SOD-123 (REV:R4)