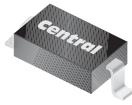


CMHSH5-4

**SURFACE MOUNT  
SILICON SCHOTTKY RECTIFIER  
500mA, 40 VOLTS**



**SOD-123 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

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

**MARKING CODE: C54**

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

Peak Repetitive Reverse Voltage
Peak Working Reverse Voltage
DC Blocking Voltage
Average Rectified Current
Peak Repetitive Forward Current
(@ rated $V_R$ , square wave, 20kHz, $T_C=115^\circ\text{C}$ )
Peak Forward Surge Current
(@ rated load, halfwave, single phase, 60Hz)
Operating Junction Temperature
Storage Temperature
Thermal Resistance
Thermal Resistanc

**SYMBOL**

$V_{RRM}$	40
$V_{RWM}$	40
$V_R$	40
$I_O$	500
$I_{FRM}$	1.0
$I_{FSM}$	5.5
$T_J$	-65 to +125
$T_{stg}$	-65 to +150
$\theta_{JL}$	118
$\theta_{JA}$	206

**UNITS**

V
V
V
mA
A
A
$^\circ\text{C}$
$^\circ\text{C}$
$^\circ\text{C/W}$
$^\circ\text{C/W}$

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

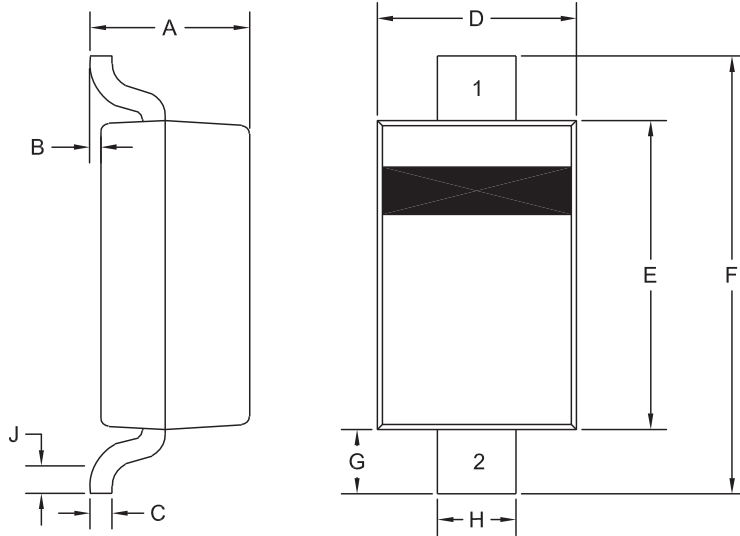
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	$V_R=20\text{V}$		10	$\mu\text{A}$
$I_R$	$V_R=20\text{V}, T_A=100^\circ\text{C}$		5.0	mA
$I_R$	$V_R=40\text{V}$		20	$\mu\text{A}$
$I_R$	$V_R=40\text{V}, T_A=100^\circ\text{C}$		13	mA
$V_F$	$I_F=500\text{mA}$		510	mV
$V_F$	$I_F=500\text{mA}, T_A=100^\circ\text{C}$		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

R5 (12-August 2010)

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



**SOD-123 CASE - MECHANICAL OUTLINE**



R5

**LEAD CODE**

- 1) Cathode
- 2) Anode

**MARKING CODE: C54**

<b>DIMENSIONS</b>				
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
J	0.010	-	0.25	-

SOD-123 (REV:R5)

R5 (12-August 2010)