

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



# Central<sup>TM</sup>

## 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<sub>A</sub>=25°C unless otherwise noted)

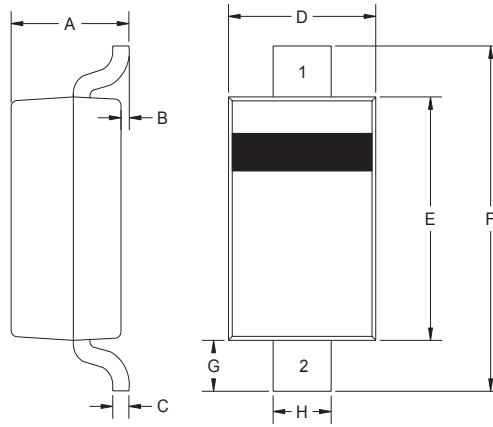
	<u>SYMBOL</u>		<u>UNITS</u>
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	40	V
Peak Working Reverse Voltage	V <sub>RWM</sub>	40	V
DC Blocking Voltage	V <sub>R</sub>	40	V
Average Rectified Current	I <sub>O</sub>	500	mA
Peak Repetitive Forward Current (@ rated V <sub>R</sub> , square wave, 20kHz, T <sub>C</sub> =115°C)	I <sub>FRM</sub>	1.0	A
Peak Forward Surge Current (@ rated load, halfwave, single phase, 60Hz)	I <sub>FSM</sub>	5.5	A
Junction Temperature	T <sub>J</sub>	-65 to +125	°C
Storage Temperature	T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	Θ <sub>JL</sub>	118	°C/W
Thermal Resistance	Θ <sub>JA</sub>	206	°C/W

ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
I <sub>R</sub>	V <sub>R</sub> =20V			10	μA
I <sub>R</sub>	V <sub>R</sub> =20V, T <sub>A</sub> =100°C			5.0	mA
I <sub>R</sub>	V <sub>R</sub> =40V			20	μA
I <sub>R</sub>	V <sub>R</sub> =40V, T <sub>A</sub> =100°C			13	mA
V <sub>F</sub>	I <sub>F</sub> =500mA			510	mV
V <sub>F</sub>	I <sub>F</sub> =500mA, T <sub>A</sub> =100°C			460	mV
V <sub>F</sub>	I <sub>F</sub> =1.0A			620	mV
V <sub>F</sub>	I <sub>F</sub> =1.0A, T <sub>A</sub> =100°C			610	mV
C <sub>T</sub>	V <sub>R</sub> =4.0V, f=1.0MHz		50		pF

R2 ( 2-November 2001)

**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.**