

CMHSH-3

**SURFACE MOUNT
SCHOTTKY DIODE**



SOD-123 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMHSH-3 type is a Silicon Schottky diode, epoxy molded in a SOD-123 surface mount package, designed for fast switching applications requiring a low forward voltage drop.

Marking Code is CH3.

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

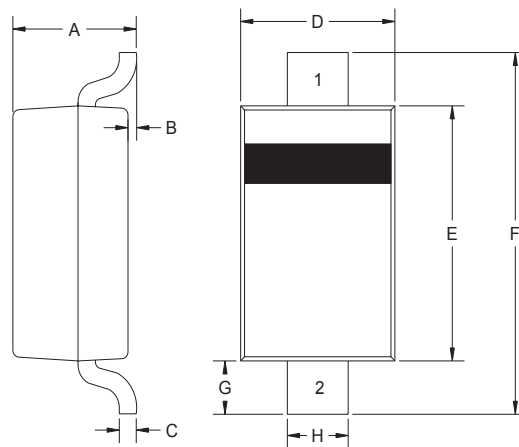
	<u>SYMBOL</u>		<u>UNITS</u>
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Continuous Forward Current	I_F	200	mA
Peak Repetitive Forward Current	I_{FRM}	300	mA
Forward Surge Current, $t_p < 1.0\text{s}$	I_{FSM}	600	mA
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	-65 to +125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	Θ_{JA}	650	$^{\circ}\text{C/W}$

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	$V_R=25\text{V}$			2.0	μA
V_{BR}	$I_R=100\mu\text{A}$	30			V
V_F	$I_F=100\mu\text{A}$			240	mV
V_F	$I_F=1.0\text{mA}$			320	mV
V_F	$I_F=10\text{mA}$			400	mV
V_F	$I_F=30\text{mA}$			500	mV
V_F	$I_F=100\text{mA}$			1000	mV
C_T	$V_R=1.0\text{V}$, $f=1\text{ MHz}$		10		pF
t_{rr}	$I_F=I_R=10\text{mA}$, $R_L=100\Omega$, Rec. to 1.0mA		10		ns

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**

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