

CMHD4448
HIGH SPEED
SWITCHING DIODE



SOD-123 CASE

CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMHD4448 type is a ultra-high speed silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a SOD-123 surface mount package, designed for high speed switching applications.

MARKING CODE: C48

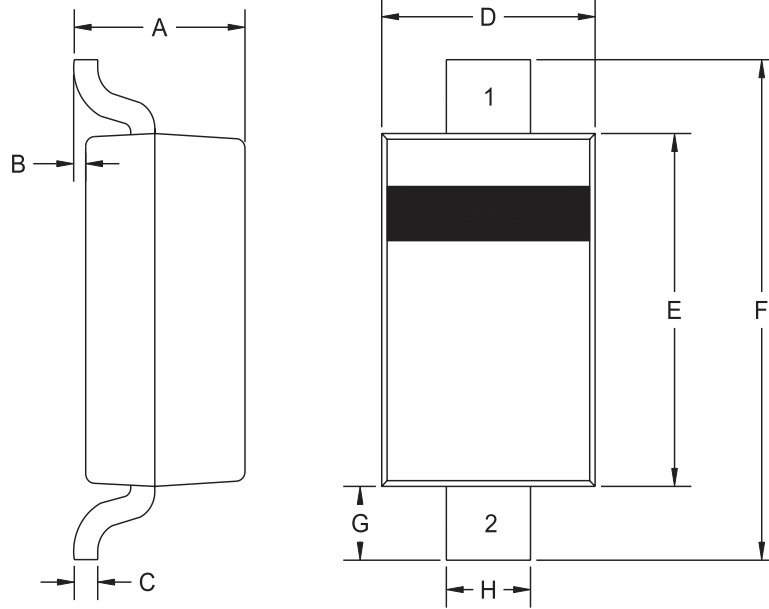
MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Average Rectified Current	I_O	150	mA
Forward Surge Current, $t_p < 1s$, $T_C = 25^\circ\text{C}$	I_{FSM}	500	mA
Power Dissipation	P_D	400	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	Θ_{JA}	312.5	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=20V$		25	nA
I_R	$V_R=20V, T_C=25^\circ\text{C}$		50	μA
I_R	$V_R=75V$		5.0	μA
V_{BR}	$I_R=100\mu\text{A}$	100		V
V_F	$I_F=5.0\text{mA}$	0.62	0.72	V
V_F	$I_F=10\text{mA}$		1.0	V
C_T	$V_R=0, f=1\text{ MHz}$		4.0	pF
t_{rr}	$V_R=6.0V, I_F=10\text{mA}, I_R=1.0\text{mA}, R_L=100\Omega$		4.0	ns

MECHANICAL OUTLINE - SOD-123



R4

LEAD CODE:

- 1) CATHODE
- 2) ANODE

MARKING CODE: C48

SYMBOL	DIMENSIONS			
	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)