

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 is C48.**

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

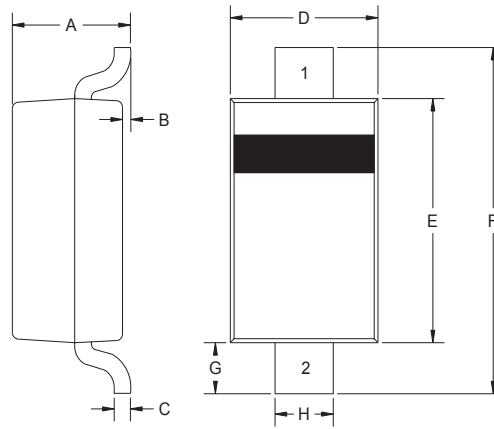
	<u>SYMBOL</u>		<u>UNITS</u>
Continuous Reverse Voltage	V _R	75	V
Peak Repetitive Reverse Voltage	V _{RRM}	100	V
Average Rectified Current	I _O	150	mA
Forward Surge Current, tp<1s, T _C =25°C	I _{FSM}	500	mA
Power Dissipation	P _D	400	mW
Operating and Storage			
Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JA}	312.5	°C/W

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>	<u>UNITS</u>
I _R	V _R =20V		25	nA
I _R	V _R =20V, T _C =25°C		50	μA
I _R	V _R =75V		5.0	μA
V _{BR}	I _R =100μA	100		V
V _F	I _F =5.0mA	0.62	0.72	V
V _F	I _F =10mA		1.0	V
C _T	V _R =0, f=1 MHz		4.0	pF
t _{rr}	V _R =6.0V, I _F =10mA, I _R =1.0mA, R _L =100Ω		4.0	ns

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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**

Marking code is C48.

R2 (2-November 2001)