

CMHD4150
SURFACE MOUNT
HIGH SPEED SWITCHING DIODE



CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMHD4150 type is a high speed silicon switching diode manufactured by the epitaxial planar process, in an epoxy molded surface mount package, designed for high speed switching applications.

Marking code is C50

MAXIMUM RATINGS: (T_A=25°C)

Continuous Reverse Voltage
 Peak Repetitive Reverse Voltage
 Continuous Forward Current
 Peak Repetitive Forward Current
 Forward Surge Current, tp=1 msec.
 Forward Surge Current, tp=1 sec.
 Power Dissipation
 Operating and Storage
 Junction Temperature
 Thermal Resistance

SYMBOL		UNITS
V _R	50	V
V _{RRM}	50	V
I _F	250	mA
I _{FRM}	250	mA
I _{FSM}	4000	mA
I _{FSM}	1000	mA
P _D	400	mW
T _J , T _{stg}	-65 to +150	°C
Θ _{JA}	312.5	°C/W

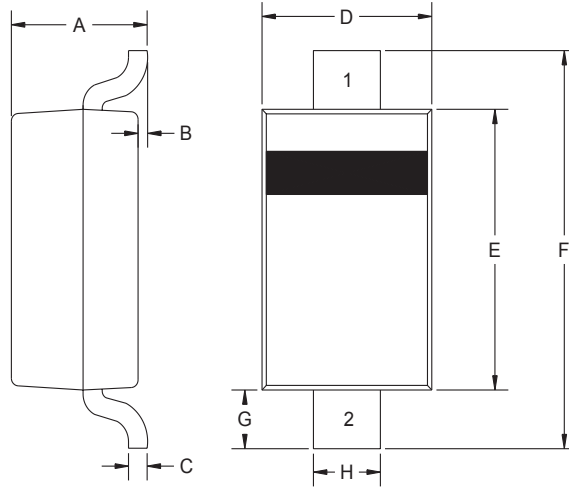
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _R	V _R =50V		100	nA
V _F	I _F =1.0mA	0.54	0.62	V
V _F	I _F =10mA	0.66	0.74	V
V _F	I _F =50mA	0.76	0.86	V
V _F	I _F =100mA	0.82	0.92	V
V _F	I _F =200mA	0.87	1.0	V
C _T	V _R =0, f=1 MHz		4.0	pF
t _{rr}	I _R =I _F =10mA, R _L =100Ω, Rec. to 1.0mA		4.0	ns

R0 (24-August 2001)

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SOD-123 CASE - MECHANICAL OUTLINE



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: C50

R0 (24-August 2001)