

CMHD457A
CMHD459A

SURFACE MOUNT
LOW LEAKAGE SILICON DIODE



SOD-123 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMHD457A, CMHD459A types are silicon planar diodes, epoxy molded in a SOD-123 surface mount package, designed for low leakage applications.

MARKING CODE:

CMHD457A: C7A
CMHD459A: C9A

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

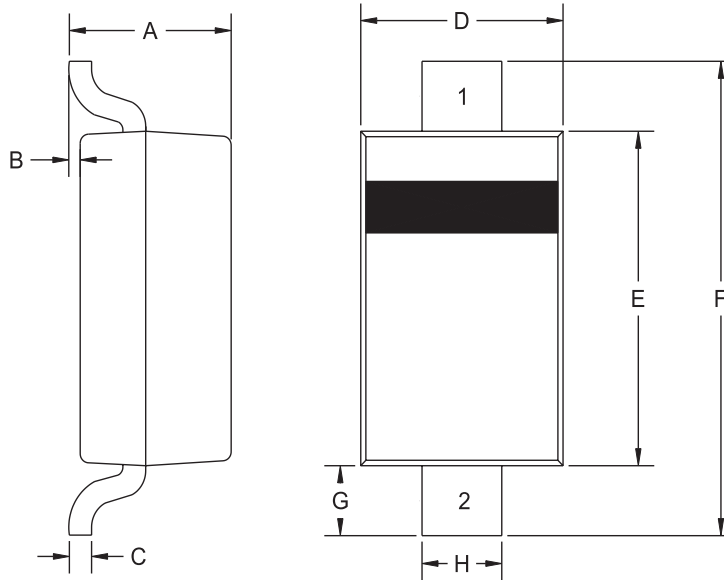
	SYMBOL	CMHD457A	CMHD459A	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	70	200	V
Peak Working Reverse Voltage	V_{RWM}	60	175	V
Average Forward Current	I_O		200	mA
Forward Steady-State Current	I_F		500	mA
Peak Forward Surge Current (1.0 μ s pulse)	I_{FSM}		4.0	A
Power Dissipation	P_D		400	mW
Operating 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	CMHD457A		CMHD459A		UNITS
		MIN	MAX	MIN	MAX	
BV_R	$I_R=100\mu\text{A}$	70		200		V
I_R	$V_R=\text{Rated } V_{RWM}$		25		25	nA
I_R	$V_R=\text{Rated } V_{RWM}, T_A=150^\circ\text{C}$		5.0		5.0	μA
V_F	$I_F=100\text{mA}$		1.0		1.0	V
C_T	$V_R=0, f=1.0\text{MHz}$		6.0		6.0	pF

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SOD-123 - MECHANICAL OUTLINE



R4

LEAD CODE

- 1) Cathode
- 2) Anode

MARKING CODE

CMHD457A: C7A
CMHD459A: C9A

DIMENSIONS				
SYMBOL	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)

R0 (11-August 2004)