

CMHD457A
CMHD459A

**SURFACE MOUNT
LOW LEAKAGE SILICON DIODE**



SOD-123 CASE



www.centalsemi.com

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 CODES:

CMHD457A: C7A

CMHD459A: C9A

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

Peak Repetitive Reverse Voltage
Peak Working Reverse Voltage
Average Forward Current
Continuous Forward Current
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL	CMHD457A	CMHD459A	UNITS
V_{RRM}	70	200	V
V_{RWM}	60	175	V
I_O		200	mA
I_F		500	mA
I_{FSM}		4.0	A
P_D		400	mW
T_J, T_{stg}		-65 to +150	$^\circ\text{C}$
θ_{JA}		312.5	$^\circ\text{C/W}$

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

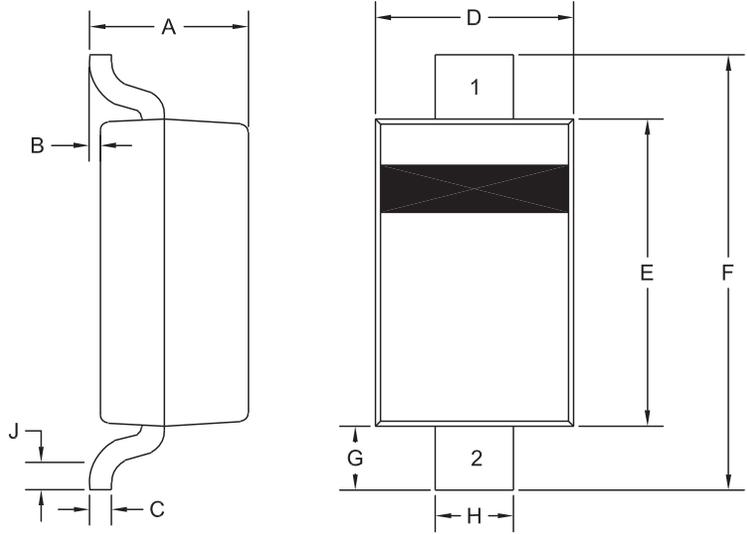
SYMBOL	TEST CONDITIONS	CMHD457A		CMHD459A		UNITS
		MIN	MAX	MIN	MAX	
I_R	$V_R=\text{Rated } V_{RWM}$		25		25	nA
I_R	$V_R=\text{Rated } V_{RWM}, T_A=150^\circ\text{C}$		5.0		5.0	μA
BV_R	$I_R=100\mu\text{A}$	70		200		V
V_F	$I_F=100\text{mA}$		1.0		1.0	V
C_T	$V_R=0, f=1.0\text{MHz}$		6.0		6.0	pF

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SOD-123 CASE - MECHANICAL OUTLINE



R5

LEAD CODE

- 1) Cathode
- 2) Anode

MARKING CODE

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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
J	0.010	-	0.25	-

SOD-123 (REV:R5)

R2 (5-August 2010)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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