

CM6SD6001
CM6SD6001A
CM6SD6001C
CM6SD6001S

SURFACE MOUNT
ULTRA LOW LEAKAGE
SILICON SWITCHING DIODES

SUPERmini™



SOT-323 CASE

• Device is **Halogen Free** by design

CM6SD6001: SINGLE
CM6SD6001A: DUAL, COMMON ANODE
CM6SD6001C: DUAL, COMMON CATHODE
CM6SD6001S: DUAL, IN-SERIES



www.centralemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CM6SD6001 SERIES are silicon switching diodes manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, designed for switching applications requiring an extremely low leakage diode.

MARKING CODE: 6C1
MARKING CODE: 61A
MARKING CODE: 61C
MARKING CODE: 61S

MAXIMUM RATINGS: (T_A=25°C)

Continuous Reverse Voltage
Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, t_p=1.0μs
Peak Forward Surge Current, t_p=1.0s
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_R 75
V_{RRM} 100
I_F 250
I_{FRM} 250
I_{FSM} 4.0
I_{FSM} 1.0
P_D 275
T_J, T_{stg} -65 to +150
Θ_{JA} 455

UNITS

V
V
mA
mA
A
A
mW
°C
°C/W

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

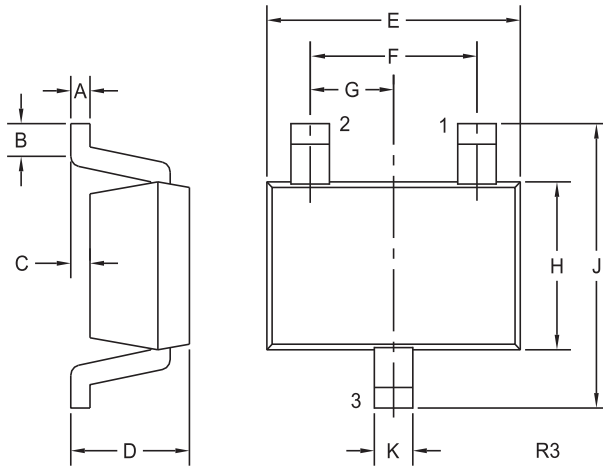
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _R	V _R =75V		500	pA
BV _R	I _R =100μA	100		V
V _F	I _F =1.0mA		0.85	V
V _F	I _F =10mA		0.95	V
V _F	I _F =100mA		1.1	V
C _T	V _R =0, f=1.0MHz		2.0	pF
t _{rr}	I _R =I _F =10mA, I _{rr} =1.0mA, R _L =100Ω		3.0	μs

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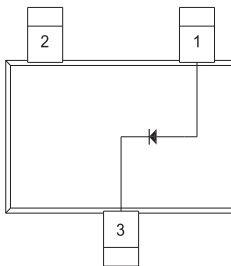
SOT-323 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.002	0.008	0.05	0.20
B	0.004	-	0.10	-
C	-	0.004	-	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.045	0.053	1.15	1.35
J	0.079	0.087	2.00	2.20
K	0.008	0.016	0.20	0.40

SOT-323 (REV: R3)

PIN CONFIGURATIONS

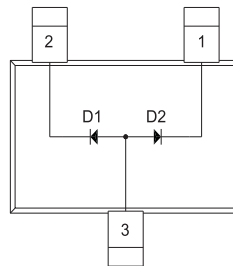


CMSD6001

LEAD CODE:

- 1) Anode
- 2) NC
- 3) Cathode

MARKING CODE: 6C1

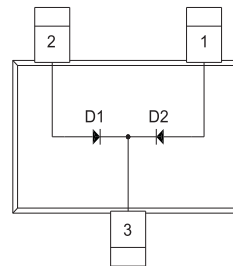


CMSD6001A

LEAD CODE:

- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, D2

MARKING CODE: 61A

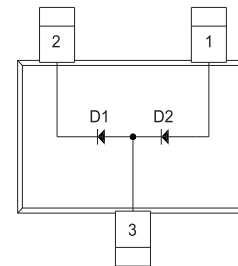


CMSD6001C

LEAD CODE:

- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, D2

MARKING CODE: 61C



CMSD6001S

LEAD CODE:

- 1) Anode D2
- 2) Cathode D1
- 3) Anode D1, Cathode D2

MARKING CODE: 61S

R3 (9-May 2011)