

CMSD6001
 CMSD6001A
 CMSD6001C
 CMSD6001S

**SURFACE MOUNT LOW LEAKAGE
 SILICON SWITCHING DIODES**

SUPERmini™



SOT-323 CASE

• Device is *Halogen Free* by design

CMSD6001: SINGLE
CMSD6001A: DUAL, COMMON ANODE
CMSD6001C: DUAL, COMMON CATHODE
CMSD6001S: DUAL, IN-SERIES



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSD6001 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: ($T_A=25^\circ\text{C}$)

Continuous Reverse Voltage
 Peak Repetitive Reverse Voltage
 Continuous Forward Current
 Peak Repetitive Forward Current
 Peak Forward Surge Current, $t_p=1.0\mu\text{s}$
 Peak Forward Surge Current, $t_p=1.0\text{s}$
 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
 $^\circ\text{C}$
 $^\circ\text{C/W}$

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

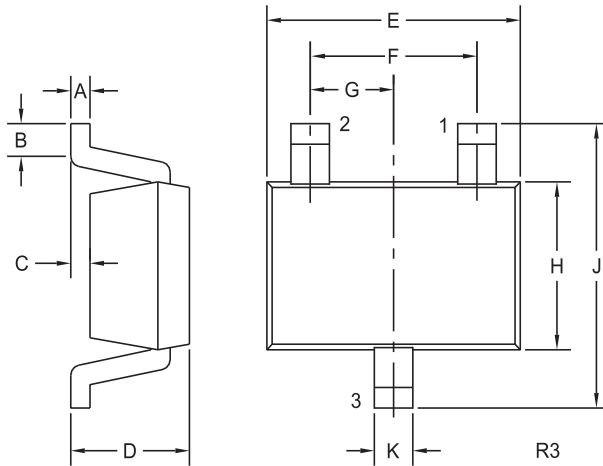
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=75\text{V}$		500	pA
BV_R	$I_R=100\mu\text{A}$	100		V
V_F	$I_F=1.0\text{mA}$		0.85	V
V_F	$I_F=10\text{mA}$		0.95	V
V_F	$I_F=100\text{mA}$		1.1	V
C_T	$V_R=0, f=1.0\text{MHz}$		2.0	pF
t_{rr}	$I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		3.0	μs

CMSD6001
 CMSD6001A
 CMSD6001C
 CMSD6001S



**SURFACE MOUNT LOW LEAKAGE
 SILICON SWITCHING DIODES**

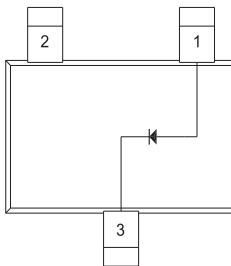
SOT-323 CASE - MECHANICAL OUTLINE



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

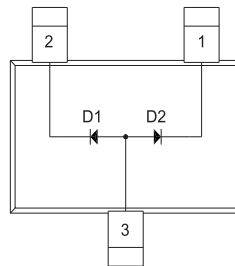
SOT-323 (REV: R3)

PIN CONFIGURATIONS



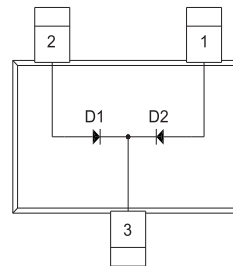
CMSD6001
LEAD CODE:
 1) Anode
 2) NC
 3) Cathode

MARKING CODE: 6C1



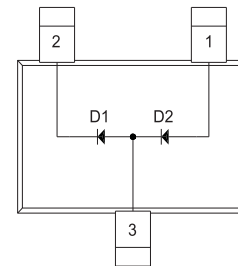
CMSD6001A
LEAD CODE:
 1) Cathode D2
 2) Cathode D1
 3) Anode D1, D2

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

R2 (8-February 2010)