CMSD6001
CMSD6001A
CMSD6001C
CMSD6001S

SURFACE MOUNT
ULTRA LOW LEAKAGE
SILICON SWITCHING DIODES

SUPERmini™

SOT-323 CASE

• Device is *Halogen Free* by design

Central™
Semiconductor Corp.

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:
CMSD6001:	SINGLE	**MARKING CODE: 6C1**
CMSD6001A:	DUAL, COMMON ANODE	**MARKING CODE: 61A**
CMSD6001C:	DUAL, COMMON CATHODE	**MARKING CODE: 61C**
CMSD6001S:	DUAL, IN-SERIES	**MARKING CODE: 61S**

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	250	mA
Peak Forward Surge Current, tp=1.0µs	I_{FSM}	4.0	A
Peak Forward Surge Current, tp=1.0s	I_{FSM}	1.0	A
Power Dissipation	P_D	275	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	455	°C/W

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

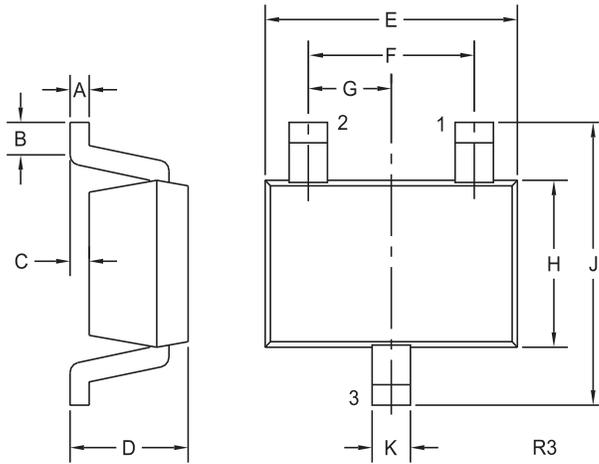| SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	V_R=75V		500	pA
BV_R	I_R=100µA	100		V
V_F	I_F=1.0mA		0.85	V
V_F	I_F=10mA		0.95	V
V_F	I_F=100mA		1.1	V
C_T	V_R=0, f=1.0MHz		2.0	pF
t_{rr}	I_R=I_F=10mA, I_{rr}=1.0mA, R_L=100Ω		3.0	µs

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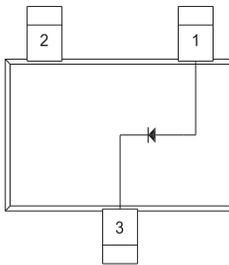**Central™**
Semiconductor Corp.

SOT-323 CASE - MECHANICAL OUTLINE

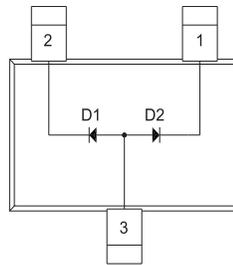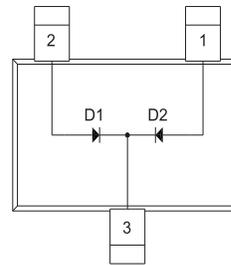| DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.002	0.008	0.05	0.20
B	0.004	-	0.10	-
C	-	0.004	-	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.045	0.053	1.15	1.35
J	0.079	0.087	2.00	2.20
K	0.008	0.016	0.20	0.40

SOT-323 (REV: R3)

PIN CONFIGURATIONS

CMSD6001

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

MARKING CODE: 6C1
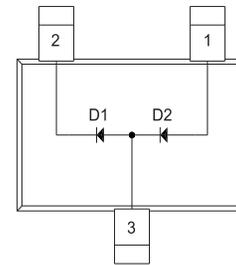
CMSD6001A

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)

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