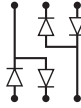


CMKD6000

SURFACE MOUNT
DUAL PAIR, IN SERIES
ULTRA LOW LEAKAGE
SILICON SWITCHING DIODES

ULTRAmulti™



SOT-363 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMKD6000 consists of two pair of electrically isolated, series configured Ultra Low Leakage Switching Diodes manufactured by the epitaxial planar process, epoxy molded in a ULTRAmulti™ SOT-363 surface mount package.

MARKING CODE: CK0

APPLICATIONS:

- Handheld Medical Devices
- Battery Operated Equipment
- High Speed Data Line Steering

FEATURES:

- Low Total Conduction Losses

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}	500
I_{FSM}	4.0
I_{FSM}	1.0
P_D	250
T_J, T_{stg}	-65 to +150
Θ_{JA}	500

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	TYP	MAX	UNITS
I_R	$V_R=75\text{V}$		400	500	pA
I_R	$V_R=5.0, T_A=50^\circ\text{C}$		10	100	pA
BV_R	$I_R=100\mu\text{A}$	100	120		V
V_F	$I_F=1.0\text{mA}$		0.77	0.85	V
V_F	$I_F=10\text{mA}$		0.85	0.95	V
V_F	$I_F=100\text{mA}$		0.96	1.1	V
C_T	$V_R=0, f=1.0\text{MHz}$		1.7	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

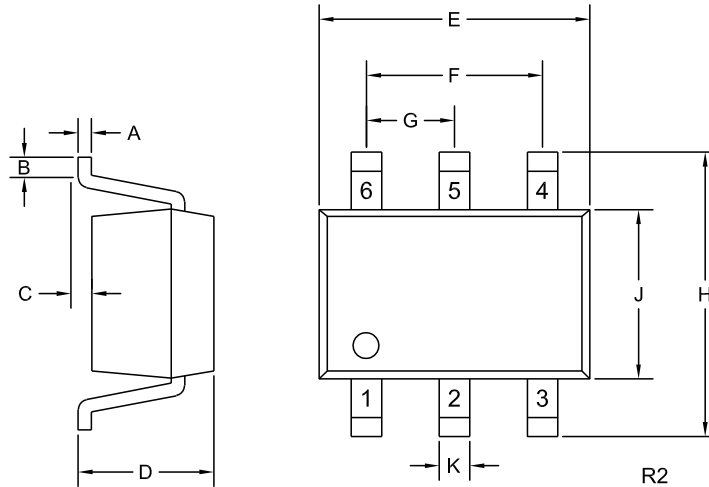
R1 (9-May 2011)

CMKD6000

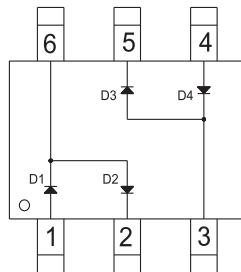
SURFACE MOUNT
DUAL PAIR, IN SERIES
ULTRA LOW LEAKAGE
SILICON SWITCHING DIODES



SOT-363 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

- 1) Anode D1
- 2) Cathode D2
- 3) Anode D3, Cathode D4
- 4) Anode D4
- 5) Cathode D3
- 6) Cathode D1, Anode D2

MARKING CODE: CK0

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.010	0.10	0.25
B	0.005	-	0.12	-
C	0.000	0.004	0.00	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	0.075	0.091	1.90	2.30
J	0.043	0.055	1.10	1.40
K	0.006	0.012	0.15	0.30

SOT-363 (REV: R2)

R1 (9-May 2011)