

CMKD6000

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



SOT-363 CASE



www.centralsemi.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 an 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°C)

Continuous Reverse Voltage

SYMBOL		UNITS
V _R	75	V
V _{RRM}	100	V
I _F	250	mA
I _{FRM}	500	mA
I _{FSM}	4.0	A
I _{FSM}	1.0	A
P _D	250	mW
T _J , T _{stg}	-65 to +150	°C
θ _{JA}	500	°C/W

Peak Repetitive Reverse Voltage

Continuous Forward Current

Peak Repetitive Forward Current

Peak Forward Surge Current, tp=1.0μs

Peak Forward Surge Current, tp=1.0s

Power Dissipation

Operating and Storage Junction Temperature

Thermal Resistance

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _R	V _R =75V		35	500	pA
I _R	V _R =5.0, T _A =50°C		10	100	pA
BV _R	I _R =100μA	100	120		V
V _F	I _F =1.0mA		0.77	0.85	V
V _F	I _F =10mA		0.85	0.95	V
V _F	I _F =100mA		0.96	1.1	V
C _J	V _R =0, f=1.0MHz		1.7	2.0	pF
t _{rr}	I _R =I _F =10mA, I _{rr} =1.0mA, R _L =100Ω			3.0	μs

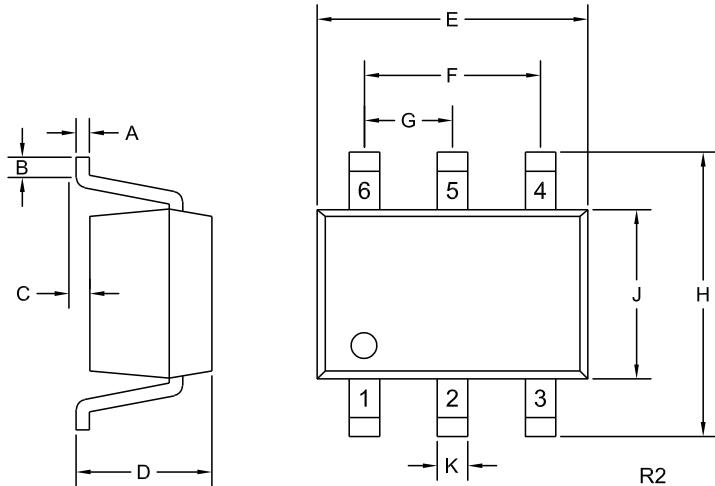
R2 (26-February 2016)

CMKD6000

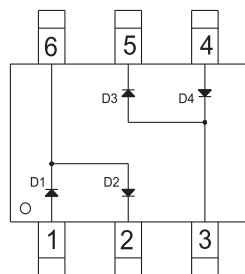
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Central
Semiconductor Corp.™

SOT-363 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



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

LEAD CODE:

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

SOT-363 (REV: R2)

MARKING CODE: CK0

R2 (26-February 2016)

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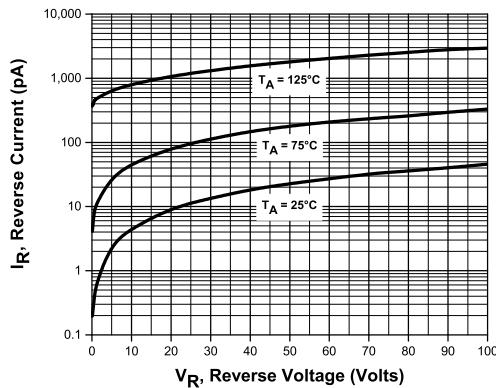
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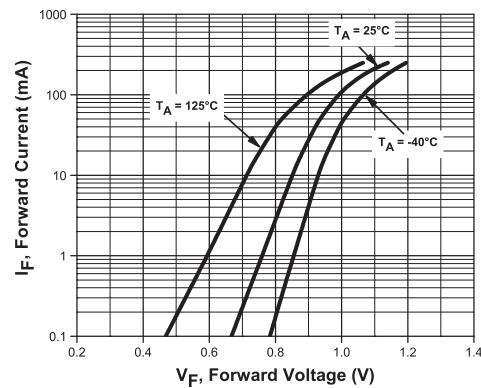


TYPICAL ELECTRICAL CHARACTERISTICS

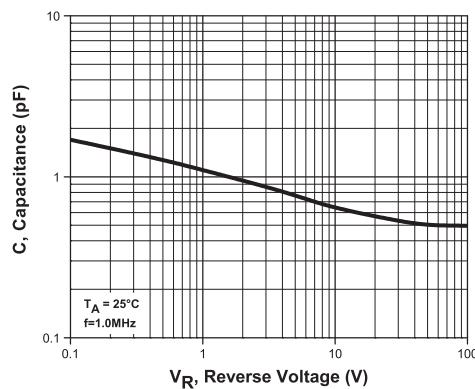
Leakage Current



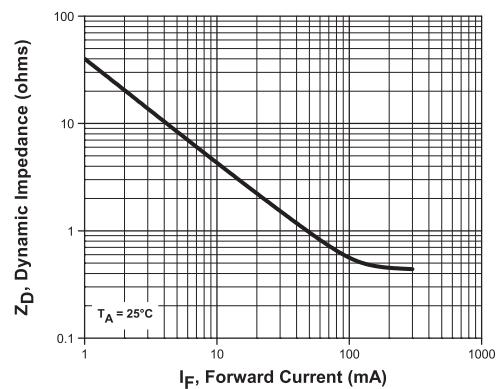
Forward Voltage



Capacitance



Forward Dynamic Impedance



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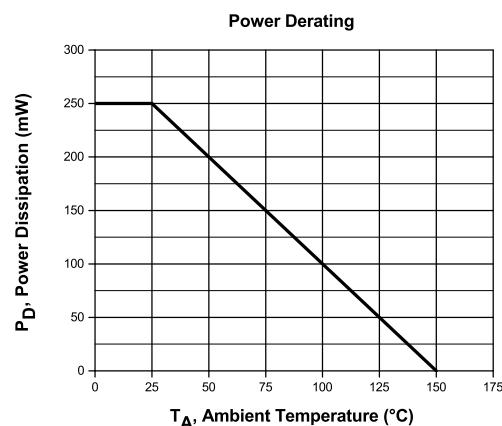
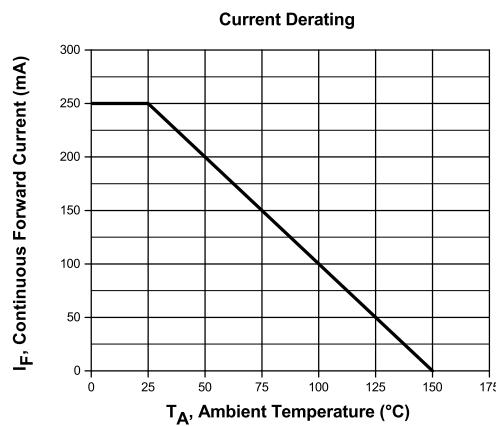
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TYPICAL ELECTRICAL CHARACTERISTICS



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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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