

CMKD6001

**SURFACE MOUNT
TRIPLE ISOLATED
ULTRA LOW LEAKAGE
SILICON SWITCHING DIODES**

ULTRAmini™



SOT-363 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMKD6001 type contains three (3) Isolated Silicon Switching Diodes, manufactured by the epitaxial planar process, epoxy molded in a ULTRAmini™ surface mount package, designed for switching applications requiring extremely low leakage.

MARKING CODE: K01

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	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

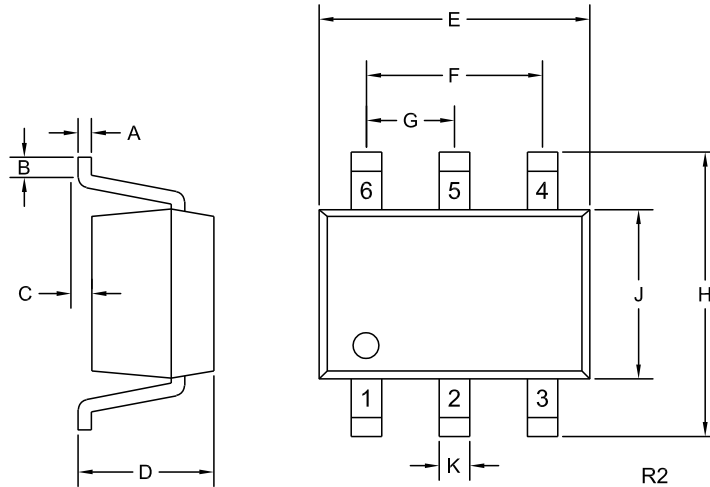
R5 (9-May 2011)

CMKD6001

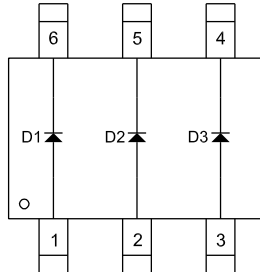
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SOT-363 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

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

MARKING CODE: K01

SYMBOL	DIMENSIONS			
	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)

R5 (9-May 2011)

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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