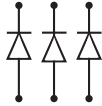


CMKD6001

SURFACE MOUNT  
ULTRAmi™  
TRIPLE ISOLATED  
LOW LEAKAGE SILICON  
SWITCHING DIODES

ULTRAmi™



SOT-363 CASE

**Central**™  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMKD6001 type contains three (3) Isolated Silicon Switching Diodes, manufactured by the epitaxial planar process, epoxy molded in a ULTRAmi™ 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  
Forward Surge Current,  $t_p=1 \mu\text{sec}$ .  
Forward Surge Current,  $t_p=1 \text{sec}$ .  
Power Dissipation  
Operating and Storage  
Junction Temperature  
Thermal Resistance

SYMBOL		UNITS
$V_R$	75	V
$V_{RRM}$	100	V
$I_F$	250	mA
$I_{FRM}$	500	mA
$I_{FSM}$	4000	mA
$I_{FSM}$	1000	mA
$P_D$	250	mW
$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
$\theta_{JA}$	500	$^\circ\text{C/W}$

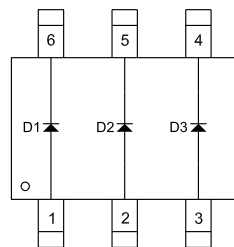
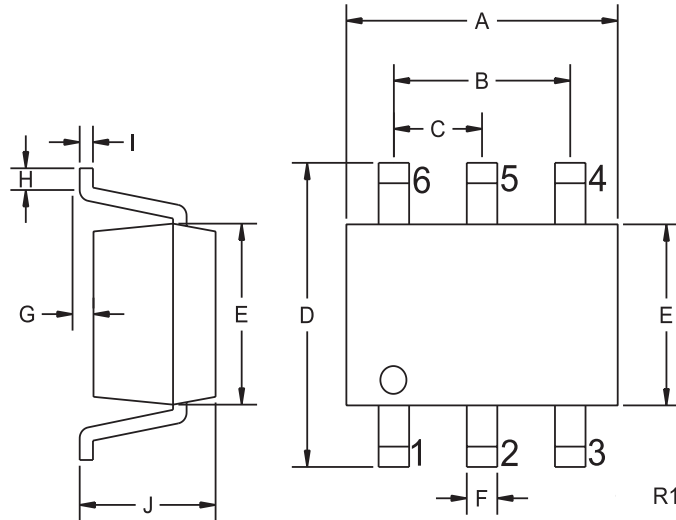
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

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
$C_T$	$V_R=0, f=1 \text{MHz}$		2.0	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, R_L=100\Omega \text{ Rec. to } 1.0\text{mA}$		3.0	$\mu\text{s}$

R2 (7-August 2003)

**SURFACE MOUNT  
ULTRAmi<sup>TM</sup>  
TRIPLE ISOLATED  
LOW LEAKAGE SILICON  
SWITCHING DIODES**

**SOT-363 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) ANODE D1
- 2) ANODE D2
- 3) ANODE D3
- 4) CATHODE D3
- 5) CATHODE D2
- 6) CATHODE D1

**MARKING CODE: K01**

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.073	0.085	1.85	2.15
B	0.051		1.30	
C	0.026		0.65	
D	0.075	0.091	1.90	2.30
E	0.043	0.055	1.10	1.40
F	0.006	0.012	0.15	0.30
G	0.000	0.004	0.00	0.10
H	0.010	-	0.25	-
I	0.004	0.010	0.10	0.25
J	0.031	0.039	0.80	1.00

SOT-363 (REV: R1)