

Central[™] Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMKD7000 consists of two pair of electrically isolated series configured ultra-high speed switching diodes in an ULTRAmimi[™] SOT-363 surface mount package, designed for ESD protection and high speed switching applications.

MARKING CODE: K00

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Peak Repetitive Reverse Voltage
Average Forward Current
Peak Forward Current
Power Dissipation
Operating and Storage
Junction Temperature
Thermal Resistance

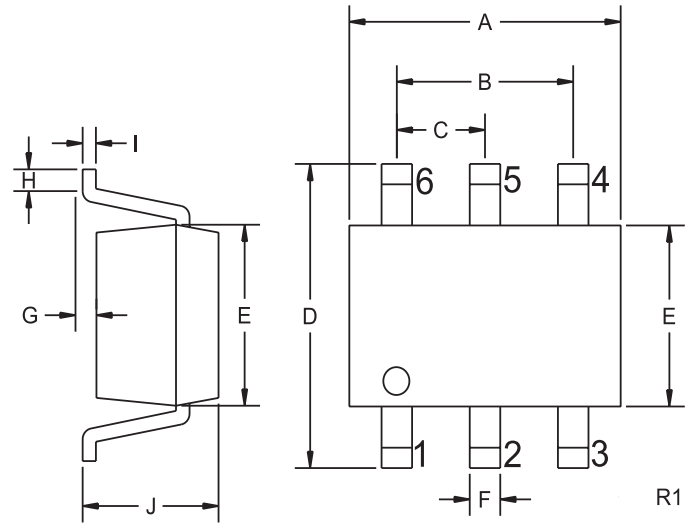
SYMBOL		UNITS
V_{RRM}	100	V
I_O	200	mA
I_{FM}	500	mA
P_D	250	mW
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
θ_{JA}	500	$^\circ\text{C/W}$

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

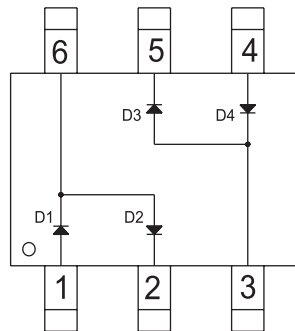
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
BV_R	$I_R=100\mu\text{A}$	100			V
I_R	$V_R=50\text{V}$			300	nA
I_R	$V_R=50\text{V}, T_A=125^\circ\text{C}$			100	μA
I_R	$V_R=100\text{V}$			500	nA
V_F	$I_F=1.0\text{mA}$	0.55		0.70	V
V_F	$I_F=10\text{mA}$	0.67		0.82	V
V_F	$I_F=100\text{mA}$	0.75		1.10	V
C_T	$V_R=0, f=1.0\text{ MHz}$			1.5	pF
t_{rr}	$I_R=I_F=10\text{mA}, R_L=100\Omega, \text{Rec. to } 1.0\text{mA}$		2.0	4.0	ns

R1 (13-November 2002)

SOT-363 CASE - MECHANICAL OUTLINE



Pin Configuration



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)

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: K00

R1 (13-November 2002)