CMKD7000

SURFACE MOUNT ULTRAmini™
DUAL PAIR OF
SERIES CONFIGURED
ULTRA-HIGH SPEED
SILICON SWITCHING DIODES

ULTRAmini™
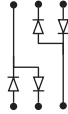
SOT-363 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

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

MARKING CODE: K00

MAXIMUM RATINGS: (T_A=25°C)

|	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Average Forward Current	I_O	200	mA
Peak Forward Current	I_{FM}	500	mA
Power Dissipation	P_D	250	mW
Operating and Storage Junction Temperature	T_J,T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	500	°C/W

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

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

R1 (13-November 2002)

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SOT-363 CASE - MECHANICAL OUTLINE

R1
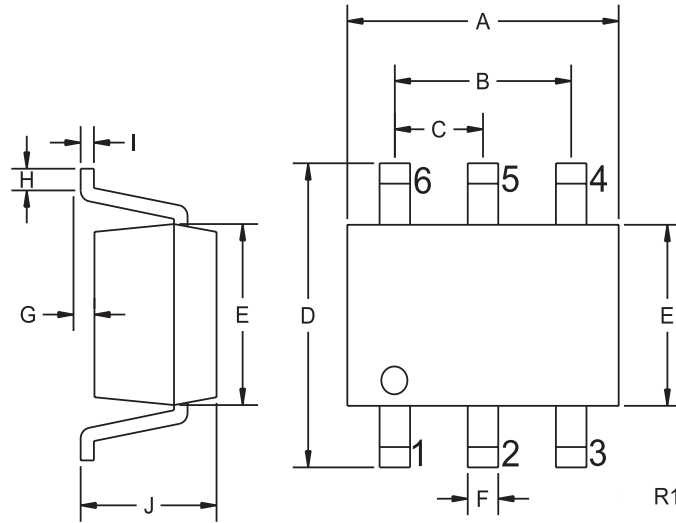
SOT-363 (REV: R1)

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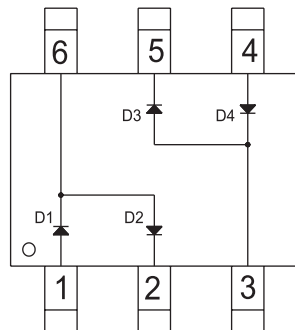
DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.073	0.085	1.85	2.15
B	0.051		1.30	
C	0.026		0.65	
D	0.075	0.091	1.90	2.30
E	0.043	0.055	1.10	1.40
F	0.006	0.012	0.15	0.30
G	0.000	0.004	0.00	0.10
H	0.010	-	0.25	-
I	0.004	0.010	0.10	0.25
J	0.031	0.039	0.80	1.00

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)