

CMKD2836  
CMKD2838

SURFACE MOUNT ULTRAmi™  
DUAL PAIR  
HIGH SPEED  
SWITCHING SILICON DIODES

ULTRAmi™



SOT-363 CASE

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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMKD2836 and CMKD2838 types consist of four high speed switching diodes arranged in two electrically isolated configurations (Common Anode and Common Cathode). These devices are manufactured by the epitaxial planar process, in an epoxy molded ULTRAmi™ surface mount package, designed for high speed switching applications.

The following configurations are available:

CMKD2836 DUAL PAIR, COMMON ANODE **MARKING CODE: K36**  
CMKD2838 DUAL PAIR, COMMON CATHODE **MARKING CODE: K38**

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

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Average Forward Current	$I_O$	200	mA
Peak Forward Current	$I_{FM}$	300	mA
Power Dissipation	$P_D$	350	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	357	$^\circ\text{C/W}$

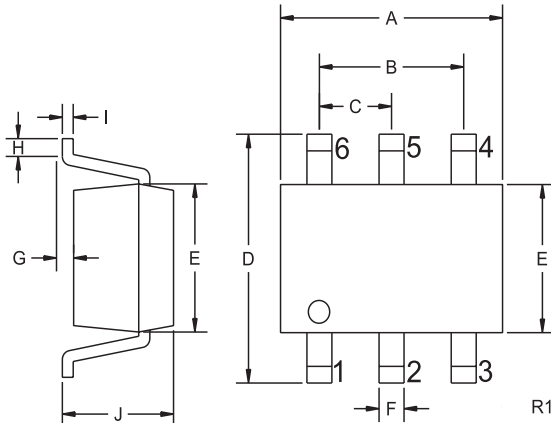
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$B_{VR}$	$I_R=100\mu\text{A}$	75			V
$I_R$	$V_R=50\text{V}$			100	nA
$V_F$	$I_F=10\text{mA}$			1.0	V
$V_F$	$I_F=50\text{mA}$			1.0	V
$V_F$	$I_F=100\text{mA}$			1.2	V
$C_T$	$V_R=0, f=1\text{ MHz}$		1.5	4.0	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, R_L=100\Omega, \text{Rec. to } 1.0\text{mA}$			4.0	ns

R1 (13-November 2002)

**SURFACE MOUNT ULTRAmi<sup>TM</sup>  
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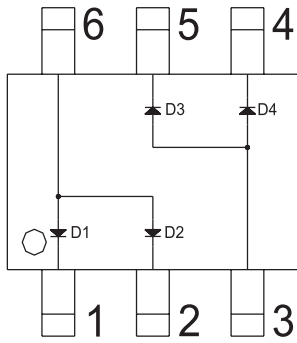
**SOT-363 CASE - MECHANICAL OUTLINE**



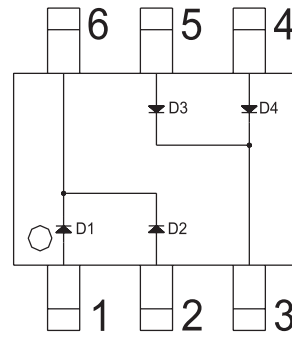
SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.073	0.085	1.85	2.15
B	0.051		1.30	
C	0.026		0.65	
D	0.075	0.091	1.90	2.30
E	0.043	0.055	1.10	1.40
F	0.006	0.012	0.15	0.30
G	0.000	0.004	0.00	0.10
H	0.010	-	0.25	-
I	0.004	0.010	0.10	0.25
J	0.031	0.039	0.80	1.00

SOT-363 (REV: R1)

**PIN OUT**



**CMKD2836**



**CMKD2838**

**MARKING CODE:**  
**CMKD2836: K36**  
**CMKD2838: K38**