

CMUD2836  
CMUD2838

SURFACE MOUNT  
ULTRAmimi™  
DUAL HIGH SPEED SILICON  
SWITCHING DIODES

ULTRAmimi™



SOT-523 CASE

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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMUD2836 and CMUD2838 types are ultra-high speed silicon switching diodes manufactured by the epitaxial planar process, in an epoxy molded ULTRAmimi™ surface mount package, designed for high speed switching applications.

The following configurations are available:

CMUD2836 DUAL, COMMON ANODE **MARKING CODE: 2CA**  
CMUD2838 DUAL, COMMON CATHODE **MARKING CODE: 6CA**

**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	$P_D$	250	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	500	$^\circ\text{C/W}$

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

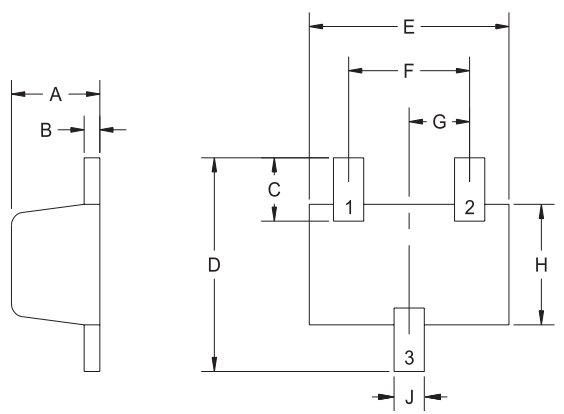
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$B_{VR}$	$I_R=100\mu\text{A}$	75			V
$I_R$	$V_R=50\text{V}$			100	nA
$V_F$	$I_F=10\text{mA}$			1.0	V
$V_F$	$I_F=50\text{mA}$			1.0	V
$V_F$	$I_F=100\text{mA}$			1.2	V
$C_T$	$V_R=0, f=1\text{ MHz}$		1.5	4.0	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, R_L=100\Omega, \text{Rec.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

R2 (12-February 2003)

**SURFACE MOUNT  
ULTRAmi<sup>TM</sup>  
DUAL HIGH SPEED SILICON  
SWITCHING DIODES**

**SOT-523 CASE - MECHANICAL OUTLINE**

BOTTOM VIEW

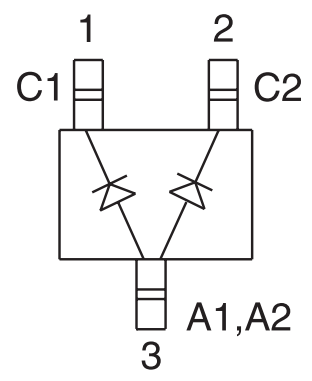


SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.023	0.031	0.58	0.78
B	0.002	0.008	0.04	0.20
C	0.013	0.021	0.34	0.54
D	0.059	0.067	1.50	1.70
E	0.059	0.067	1.50	1.70
F	0.035	0.043	0.90	1.10
G	0.020		0.50	
H	0.031	0.039	0.78	0.98
J	0.010	0.014	0.25	0.35

SOT-523 (REV: R2)

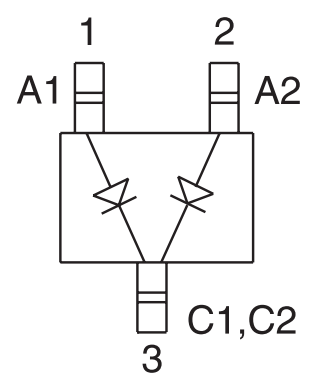
R2

Bottom View



**CMUD2836  
MARKING CODE: 2CA**

Bottom View



**CMUD2838  
MARKING CODE: 6CA**