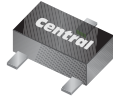


CMUD2836  
CMUD2838

**SURFACE MOUNT  
DUAL, HIGH SPEED  
SILICON SWITCHING DIODES**

**ULTRAmi™**



**SOT-523 CASE**

**Central™**  
Semiconductor Corp.

[www.centrasemi.com](http://www.centrasemi.com)

**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 ULTRAmi™ surface mount package, designed for high speed switching applications.

The following configurations are available:

**CMUD2836** DUAL, COMMON ANODE  
**CMUD2838** DUAL, COMMON CATHODE

**MARKING CODE: 2CA**  
**MARKING CODE: 6CA**

**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**

$V_{RRM}$  75  
 $I_O$  200  
 $I_{FM}$  300  
 $P_D$  250  
 $T_J, T_{stg}$  -65 to +150  
 $\theta_{JA}$  500

**UNITS**

V  
mA  
mA  
mW  
 $^\circ\text{C}$   
 $^\circ\text{C/W}$

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

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

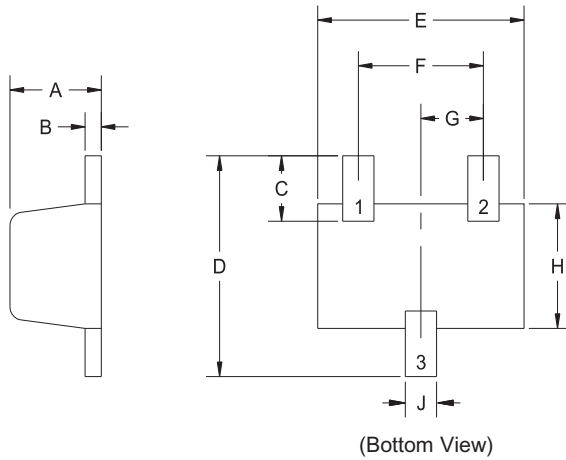
R5 (9-February 2010)

CMUD2836  
CMUD2838

SURFACE MOUNT  
DUAL, HIGH SPEED  
SILICON SWITCHING DIODES



SOT-523 CASE - MECHANICAL OUTLINE

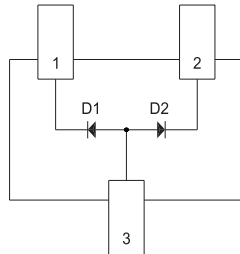


SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.023	0.031	0.58	0.78
B	0.002	0.008	0.04	0.20
C	0.013	0.021	0.34	0.54
D	0.059	0.067	1.50	1.70
E	0.059	0.067	1.50	1.70
F	0.035	0.043	0.90	1.10
G	0.020		0.50	
H	0.031	0.039	0.78	0.98
J	0.010	0.014	0.25	0.35

R2

SOT-523 (REV: R2)

PIN CONFIGURATIONS

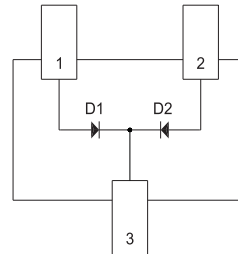


**CMUD2836**

**LEAD CODE:**

- 1) Cathode D1
- 2) Cathode D2
- 3) Anode D1, D2

**MARKING CODE: 2CA**



**CMUD2838**

**LEAD CODE:**

- 1) Anode D1
- 2) Anode D2
- 3) Cathode D1, D2

**MARKING CODE: 6CA**

R5 (9-February 2010)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### CONTACT US

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