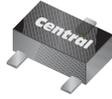


CMUD2836
CMUD2838

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

ULTRAmi™



SOT-523 CASE

Central™
Semiconductor Corp.

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		UNITS
V_{RRM}	75	V
I_O	200	mA
I_{FM}	300	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
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

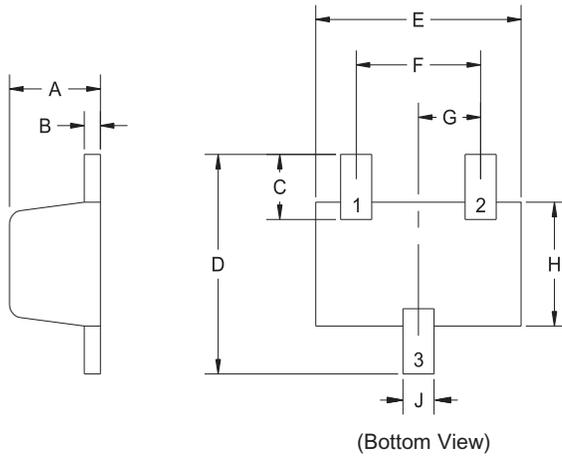
R5 (9-February 2010)

CMUD2836
CMUD2838

SURFACE MOUNT
DUAL, HIGH SPEED
SILICON SWITCHING DIODES



SOT-523 CASE - MECHANICAL OUTLINE

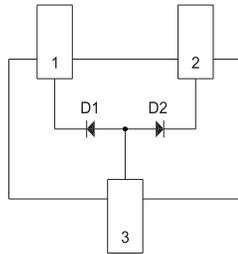


SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.023	0.031	0.58	0.78
B	0.002	0.008	0.04	0.20
C	0.013	0.021	0.34	0.54
D	0.059	0.067	1.50	1.70
E	0.059	0.067	1.50	1.70
F	0.035	0.043	0.90	1.10
G	0.020		0.50	
H	0.031	0.039	0.78	0.98
J	0.010	0.014	0.25	0.35

R2

SOT-523 (REV: R2)

PIN CONFIGURATIONS

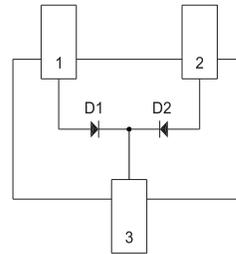


CMUD2836

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



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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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