

CMUD7000

**SURFACE MOUNT
DUAL, IN SERIES
SILICON SWITCHING DIODES**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMUD7000 type is an ultra-high speed silicon switching diode manufactured by the epitaxial planar process, in an epoxy molded ULTRAmulti™ surface mount package, connected in a series configuration, designed for high speed switching applications.

MARKING CODE: CC5

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

Peak Repetitive Reverse Voltage	
Average Forward Current	
Peak Forward Current, $t_p=1.0s$	
Power Dissipation	
Operating and Storage Junction Temperature	
Thermal Resistance	

SYMBOL

V_{RRM}	100
I_O	200
I_{FM}	500
P_D	250
T_J, T_{stg}	-65 to +150
θ_{JA}	500

UNITS

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

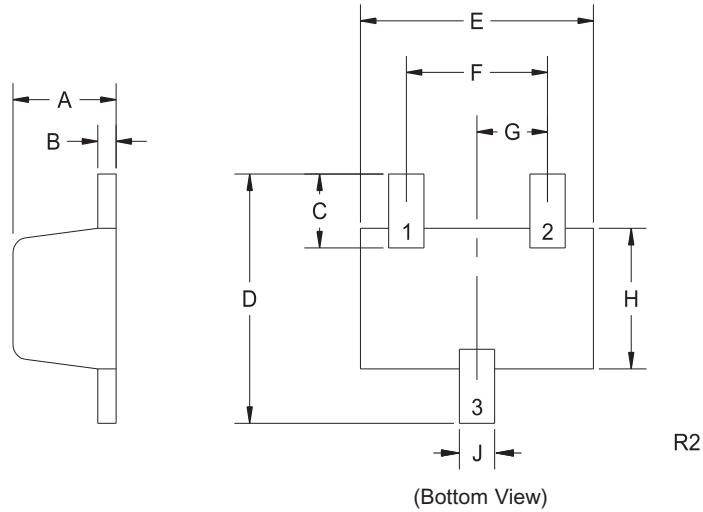
ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=50V$			300	nA
I_R	$V_R=50V, T_A=125^\circ\text{C}$			100	μA
I_R	$V_R=100V$			500	nA
BV_R	$I_R=100\mu\text{A}$	100			V
V_F	$I_F=1.0\text{mA}$	0.55		0.70	V
V_F	$I_F=10\text{mA}$	0.67		0.82	V
V_F	$I_F=100\text{mA}$	0.75		1.10	V
C_T	$V_R=0, f=1.0\text{MHz}$		1.5	2.6	pF
t_{rr}	$I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		2.0	4.0	ns

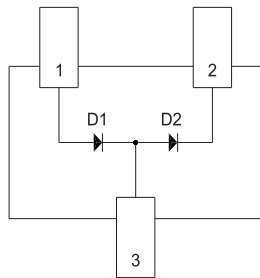
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SOT-523 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



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)

LEAD CODE:

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

MARKING CODE: CC5

R4 (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

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