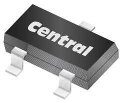
CMSD7000

SURFACE MOUNT
DUAL, IN SERIES
SILICON SWITCHING DIODES

SUPERmini™



SOT-323 CASE

www.centralsemi.com

DESCRIPTION:
The CENTRAL SEMICONDUCTOR CMSD7000 type is a ultra-high speed silicon switching diodes manufactured by the epitaxial planar process, in an epoxy molded super-mini surface mount package, connected in a series configuration, designed for high speed switching applications.

MARKING CODE: 5CC

MAXIMUM RATINGS: (T_A =25°C)	**SYMBOL**		**UNITS**
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Average Forward Current	I_O	200	mA
Peak Forward Current, tp=1.0s	I_{FM}	500	mA
Power Dissipation	P_D	275	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	455	°C/W

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A =25°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°C			100	µA
I_R	V_R=100V			500	nA
BV_R	I_R=100µA	100			V
V_F	I_F=1.0mA	0.55		0.70	V
V_F	I_F=10mA	0.67		0.82	V
V_F	I_F=100mA	0.75		1.10	V
C_T	V_R=0, f=1.0MHz		1.5	2.6	pF
t_{rr}	I_R=I_F=10mA, I_{rr}=1.0mA, R_L=100Ω		2.0	4.0	ns

R4 (8-February 2010)

CMSD7000

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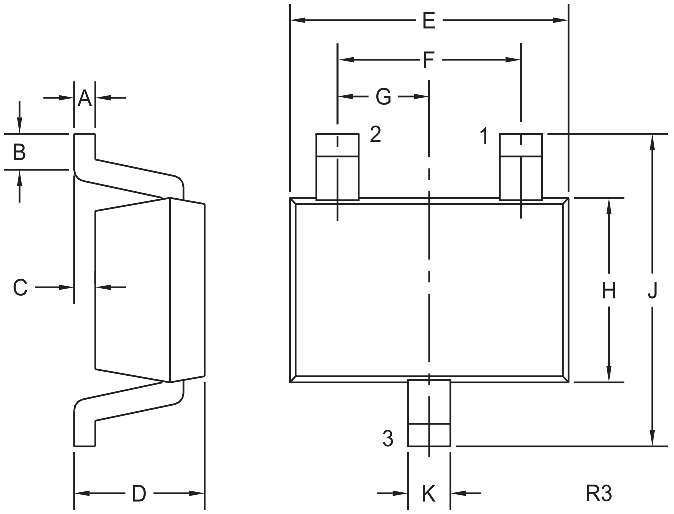
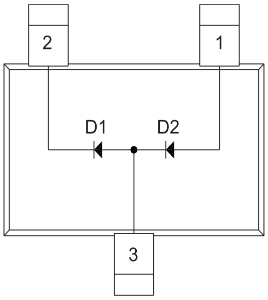
Central
Semiconductor Corp.

SOT-323 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:
1) Anode D2
2) Cathode D1
3) Anode D1, Cathode D2

MARKING CODE: 5CC

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.002	0.008	0.05	0.20
B	0.004	-	0.10	-
C	-	0.004	-	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.045	0.053	1.15	1.35
J	0.079	0.087	2.00	2.20
K	0.008	0.016	0.20	0.40

SOT-323 (REV: R3)

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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