

**CMSD7000**

**SUPER-MINI
DUAL SILICON SWITCHING DIODE
SERIES CONNECTION**

**SUPERTM
mini**

**SOT-323 CASE**

CentralTM
Semiconductor Corp.

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 is 5CC.

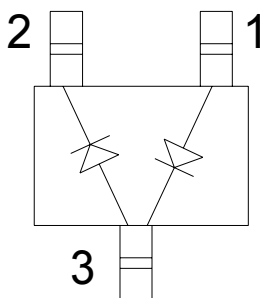
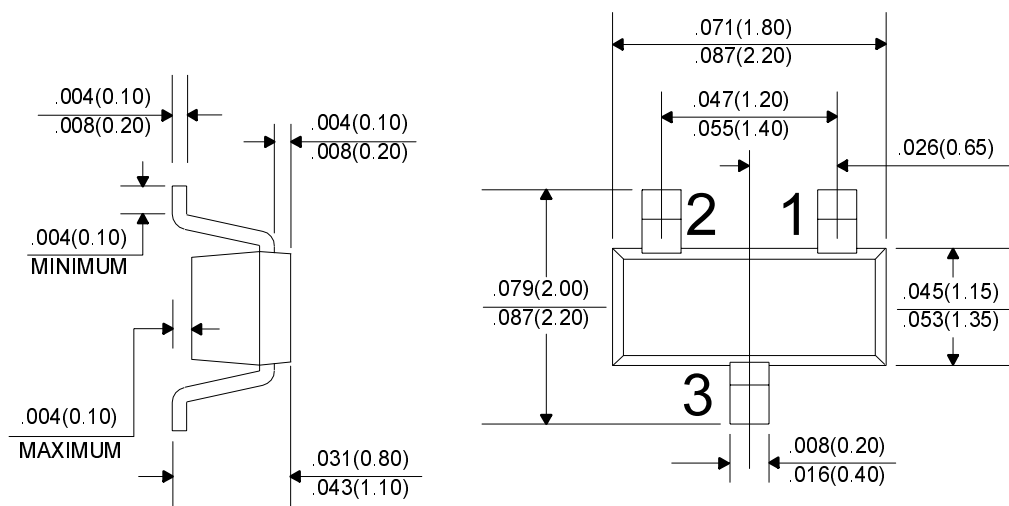
MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Average Forward Current	I_O	200	mA
Peak Forward Current	I_{FM}	500	mA
Power Dissipation	P_D	250	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	
$^{\circ}\text{C}$			
Thermal Resistance	Θ_{JA}	500	$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
BV_R	$I_R=100\mu\text{A}$	100			V
I_R	$V_R=50\text{V}$			300	nA
I_R	$V_R=50\text{V}, T_A=125^{\circ}\text{C}$			100	μA
I_R	$V_R=100\text{V}$			500	nA
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	$V_R=0, f=1\text{ MHz}$			1.5	pF
t_{rr}	$I_R=I_F=10\text{mA}, R_L=100\Omega, \text{Rec. to } 1.0\text{mA}$		2.0	4.0	ns

All Dimensions in Inches (mm).



Lead Code:

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