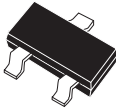


## CMPD7000

### DUAL SILICON SWITCHING DIODE SERIES CONNECTION



SOT-23 CASE

### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD7000 type is an ultra-high speed silicon switching diodes manufactured by the epitaxial planar process, in an epoxy molded surface mount package, connected in a series configuration, designed for high speed switching applications.

**Marking Code is C5C.**

### MAXIMUM RATINGS (T<sub>A</sub>=25°C)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Average Forward Current	I <sub>O</sub>	200	mA
Peak Forward Current	I <sub>FM</sub>	500	mA
Power Dissipation	P <sub>D</sub>	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	357	°C/W

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
BV <sub>R</sub>	I <sub>R</sub> =100μA	100			V
I <sub>R</sub>	V <sub>R</sub> =50V			300	nA
I <sub>R</sub>	V <sub>R</sub> =50V, T <sub>A</sub> =125°C			100	μA
I <sub>R</sub>	V <sub>R</sub> =100V			500	nA
V <sub>F</sub>	I <sub>F</sub> =1.0mA	0.55		0.70	V
V <sub>F</sub>	I <sub>F</sub> =10mA	0.67		0.82	V
V <sub>F</sub>	I <sub>F</sub> =100mA	0.75		1.10	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1 MHz			1.5	pF
t <sub>rr</sub>	I <sub>R</sub> =I <sub>F</sub> =10mA, R <sub>L</sub> =100Ω, Rec. to 1.0mA		2.0	4.0	ns

All dimensions in inches (mm).

