



CMDD2004

**SUPERmini™  
SURFACE MOUNT  
HIGH VOLTAGE SWITCHING DIODE**

**SUPERmini™**



**SOD-323 CASE**

# Central™

**Semiconductor Corp.**

**DESCRIPTION:**

The Central Semiconductor CMDD2004 is a high voltage silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, designed for applications requiring high voltage capability.

**MARKING CODE: C24**

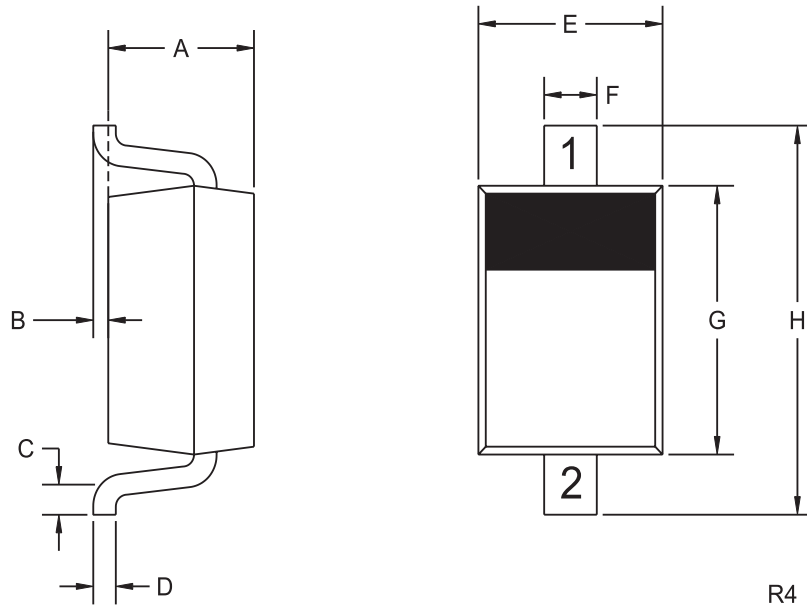
**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V <sub>R</sub>	240	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	300	V
Peak Repetitive Reverse Current	I <sub>O</sub>	200	mA
Continuous Forward Current	I <sub>F</sub>	225	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	625	mA
Forward Surge Current, tp=1 μsec.	I <sub>FSM</sub>	4000	mA
Forward Surge Current, tp=1 sec.	I <sub>FSM</sub>	1000	mA
Power Dissipation	P <sub>D</sub>	250	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +175	°C
Thermal Resistance	θ <sub>JA</sub>	600	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
BV <sub>R</sub>	I <sub>R</sub> =100μA	300		V
I <sub>R</sub>	V <sub>R</sub> =240V		100	nA
I <sub>R</sub>	V <sub>R</sub> =240V, T <sub>A</sub> =150°C		100	μA
V <sub>F</sub>	I <sub>F</sub> =100mA		1.0	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1 MHz		5.0	pF
t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =30mA, Rec. To 3.0mA, R <sub>L</sub> =100Ω		50	ns

**SOD-323 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) CATHODE
- 2) ANODE

**MARKING CODE: C24**

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.031	0.039	0.80	1.00
B	0.000	0.004	0.00	0.10
C	0.008	-	0.20	-
D	0.004	0.007	0.11	0.19
E	0.045	0.053	1.15	1.35
F	-	0.014	-	0.35
G	0.063	0.071	1.60	1.80
H	0.094	0.102	2.40	2.60

SOD-323 (REV: R4)