

**CMDD2004**  
**SUPERmini™**  
**SURFACE MOUNT**  
**HIGH VOLTAGE SWITCHING DIODE**

**SUPERmini™**  
  
**SOD-323 CASE**

# Central™

**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMDD2004 type 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 is **C24**.

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

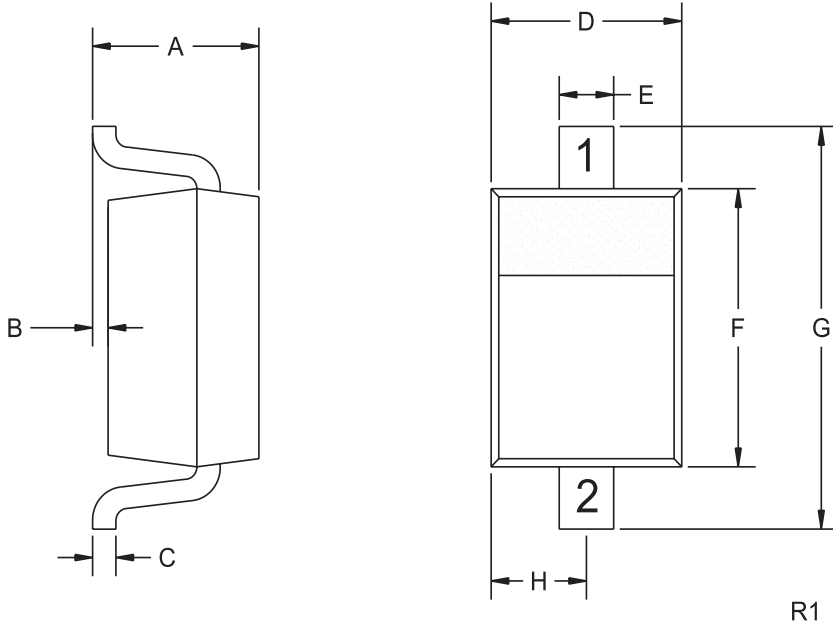
	<b>SYMBOL</b>		<b>UNITS</b>
Continuous Reverse Voltage	V <sub>R</sub>	240	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	300	V
Peak Repetitive Reverse Current	I <sub>O</sub>	200	mA
Continuous Forward Current	I <sub>F</sub>	225	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	625	mA
Forward Surge 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 +150	°C
Thermal Resistance	θ <sub>JA</sub>	500	°C/W

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>MAX</b>	<b>UNIT</b>
B <sub>VR</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

**SUPERmini**<sup>TM</sup>  
**SURFACE MOUNT**  
**HIGH VOLTAGE SWITCHING**  
**DIODE**

**SOD-323 CASE - MECHANICAL OUTLINE**



LEAD CODE:

- 1) Cathode
- 2) Anode

**MARKING CODE: C24**

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.039	0.043	1.00	1.10
B	0.000	0.004	0.00	0.10
C	0.005	0.008	0.14	0.22
D	0.045	0.053	1.15	1.35
E	0.011	0.015	0.28	0.38
F	0.063	0.071	1.60	1.80
G	0.094	0.102	2.40	2.60
H	0.023	0.027	0.58	0.68

SOD-323 (REV: R1)

R1 ( 7-August 2001)