

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

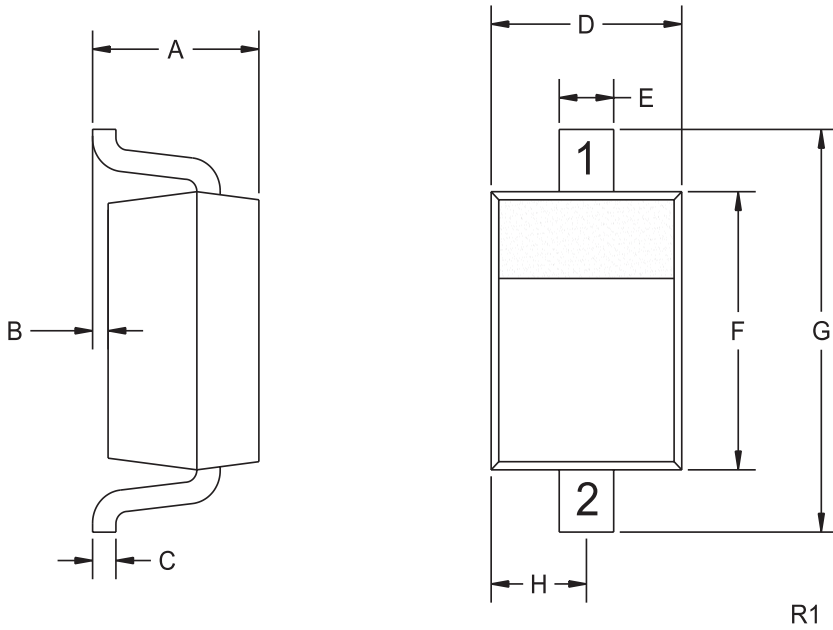
	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	240	V
Peak Repetitive Reverse Voltage	V_{RRM}	300	V
Peak Repetitive Reverse Current	I_O	200	mA
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	mA
Forward Surge Current, $t_p=1 \mu\text{sec}$.	I_{FSM}	4000	mA
Forward Surge Current, $t_p=1 \text{ sec}$.	I_{FSM}	1000	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	MAX	UNIT
B_{VR}	$I_R=100\mu\text{A}$	300		V
I_R	$V_R=240\text{V}$		100	nA
I_R	$V_R=240\text{V}, T_A=150^\circ\text{C}$		100	μA
V_F	$I_F=100\text{mA}$		1.0	V
C_T	$V_R=0, f=1 \text{ MHz}$		5.0	pF
t_{rr}	$I_F=I_R=30\text{mA}, \text{Rec. To } 3.0\text{mA}, R_L=100\Omega$		50	ns

SUPERminiTM
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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)