



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**

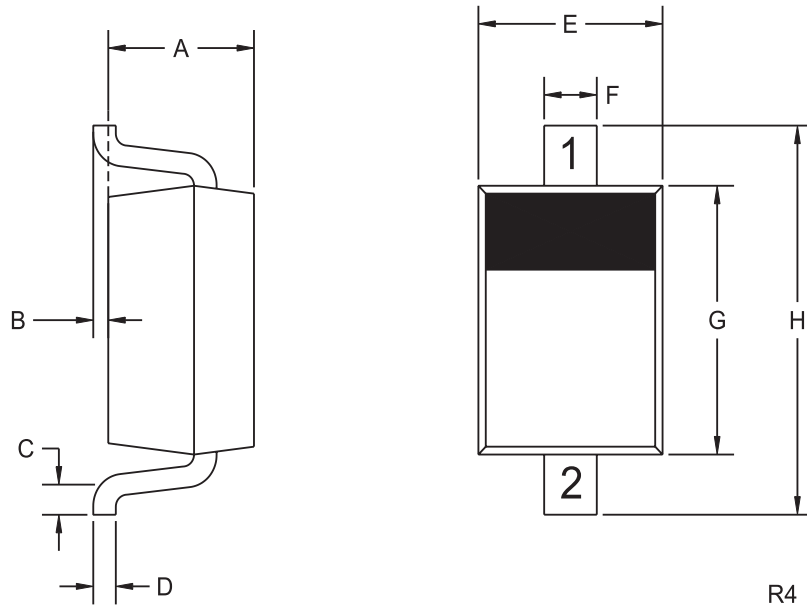
**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

	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 +175	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	600	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
$BV_R$	$I_R=100\mu\text{A}$	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	$\mu\text{A}$
$V_F$	$I_F=100\text{mA}$		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

**SOD-323 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) CATHODE
- 2) ANODE

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SYMBOL	DIMENSIONS			
	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)