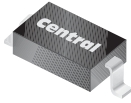


CMDD2004

**SURFACE MOUNT
HIGH VOLTAGE
SILICON SWITCHING DIODE**

SUPERmini™



SOD-323 CASE

Central™
Semiconductor Corp.

www.centrasemi.com

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

Continuous Reverse Voltage
Peak Repetitive Reverse Voltage
Peak Repetitive Reverse Current
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$
Peak Forward Surge Current, $t_p=1.0\text{s}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL		UNITS
V_R	250	V
V_{RRM}	300	V
I_O	200	mA
I_F	225	mA
I_{FRM}	625	mA
I_{FSM}	4.0	A
I_{FSM}	1.0	A
P_D	250	mW
T_J, T_{stg}	-65 to +175	$^\circ\text{C}$
θ_{JA}	600	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_R	$V_R=240\text{V}$		100	nA
I_R	$V_R=240\text{V}, T_A=150^\circ\text{C}$		100	μA
BV_R	$I_R=100\mu\text{A}$	300		V
V_F	$I_F=100\text{mA}$		1.0	V
C_T	$V_R=0, f=1.0\text{MHz}$		5.0	pF
t_{rr}	$I_F=I_R=30\text{mA}, I_{rr}=3.0\text{mA}, R_L=100\Omega$		50	ns

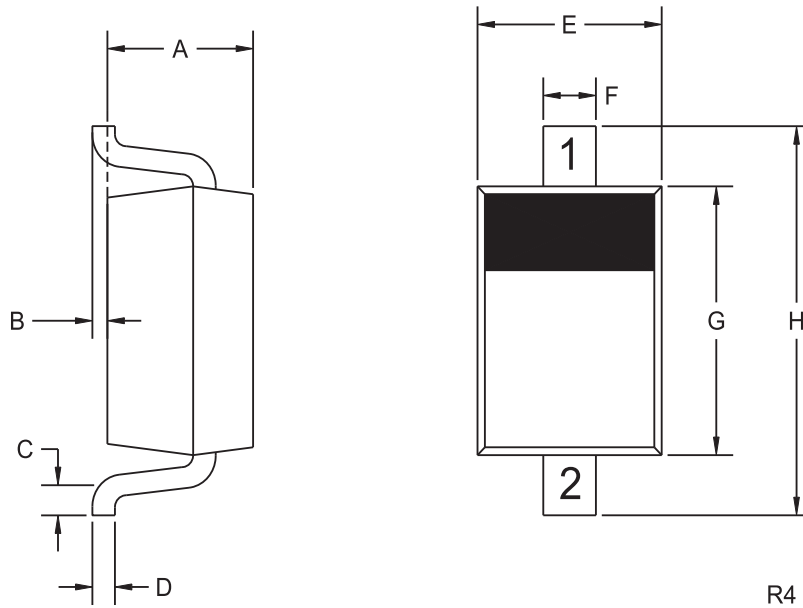
R6 (24-June 2011)

CMDD2004

SURFACE MOUNT
HIGH VOLTAGE
SILICON SWITCHING DIODE



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)

R6 (24-June 2011)