

CMOD2004

ULTRAmi™
SURFACE MOUNT HIGH VOLTAGE
SWITCHING DIODE

ULTRAmi™



SOD-523 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMOD2004 type is a high voltage silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a ULTRAmi™ surface mount package, designed for applications requiring high voltage capability. Marking code is 04.

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

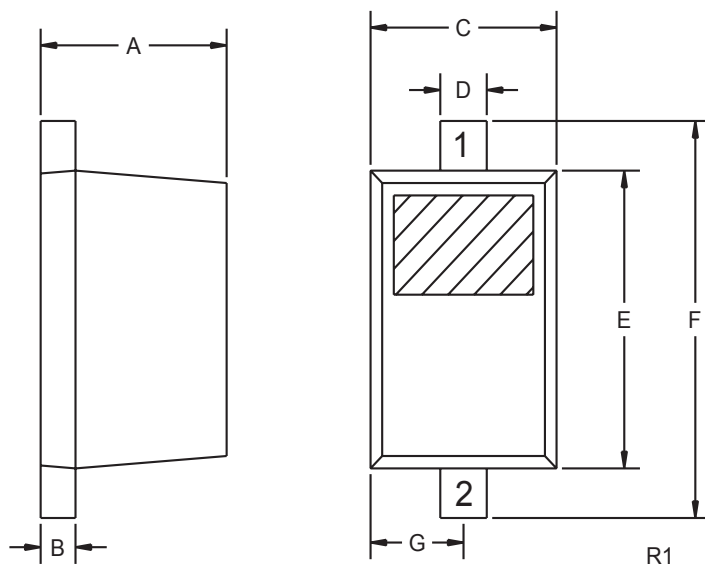
	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	240	V
Peak Repetitive Reverse Voltage	V_{RRM}	300	V
Peak Repetitive Reverse Current	I_O	200	mA
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	mA
Forward Surge Current, $t_p=1 \mu\text{s}$	I_{FSM}	4000	mA
Forward Surge Current, $t_p=1 \text{ s}$	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
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	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

R1 (26-June 2001)

SOD-523 CASE MECHANICAL OUTLINE



Lead Code:
1) Cathode
2) Anode

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.020	0.031	0.50	0.80
B	0.004	0.008	0.10	0.20
C	0.028	0.035	0.70	0.90
D	0.008	0.011	0.20	0.28
E	0.039	0.055	1.00	1.40
F	0.055	0.071	1.40	1.80
G	0.016		0.40	

SOD-523 (REV: R1)

R1 (26-June 2001)