CMOD2004

SURFACE MOUNT
ULTRAmini™
HIGH VOLTAGE
SILICON SWITCHING DIODE

ULTRAmini™

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 ULTRAmini™ surface mount package, designed for applications requiring high voltage capability.

MARKING CODE: 04

MAXIMUM RATINGS: (T_A=25°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, tp=1 μs	I_{FSM}	4000	mA
Forward Surge Current, tp=1 s	I_{FSM}	1000	mA
Power Dissipation	P_D	250	mW
Operating and Storage Junction Temperature	T_J,T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	500	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
BV_R	I_R=100μA	300		V
I_R	V_R=240V		100	nA
I_R	V_R=240V, T_A=150°C		100	μA
V_F	I_F=100mA		1.0	V
C_T	V_R=0, f=1 MHz		5.0	pF
t_{rr}	I_F=I_R=30mA, Rec. To 3.0mA, R_L=100Ω		50	ns

R2 (13-November 2002)

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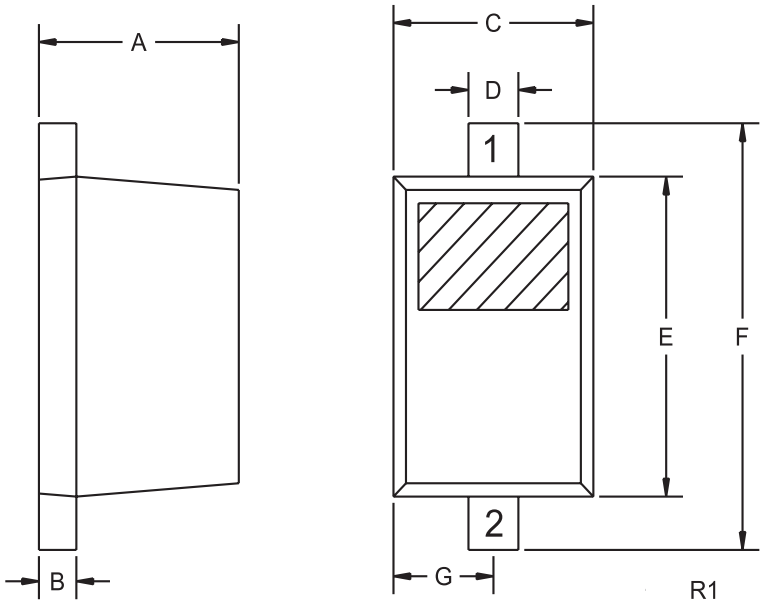
SOD-523 CASE - MECHANICAL OUTLINE



LEAD CODE:
1) CATHODE
2) ANODE

MARKING CODE: 04

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

R2 (13-November 2002)