

CMOD3003
SURFACE MOUNT
ULTRAmi™
LOW LEAKAGE
SILICON SWITCHING DIODE

ULTRAmi™



SOD-523 CASE

Central™

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMOD6001 type is a silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a ULTRAmi™ surface mount package, designed for switching applications requiring a extremely low leakage diode.

MARKING CODE: 3C

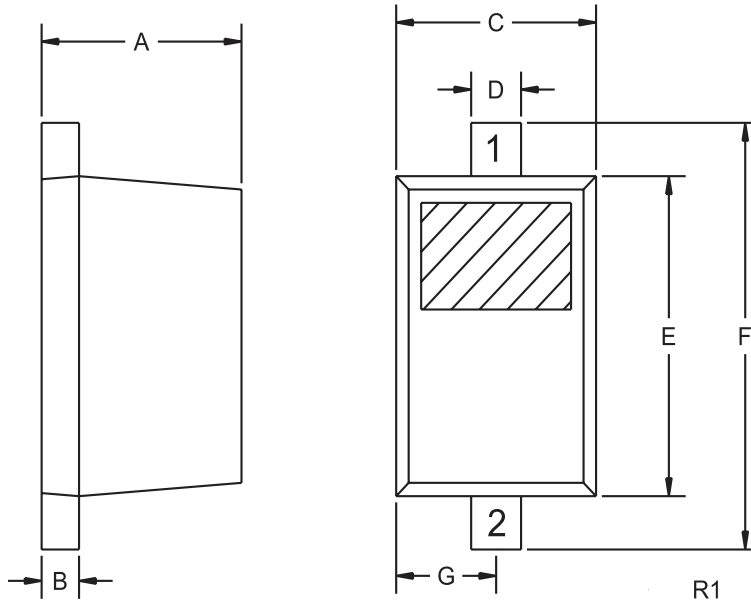
MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	180	V
Average Rectified Current	I_O	200	mA
Continuous Forward Current	I_F	600	mA
Peak Repetitive Forward Current	I_{FRM}	700	mA
Forward Surge Current, $t_p=1.0 \mu\text{sec.}$	I_{FSM}	2.0	A
Forward Surge Current, $t_p=1.0 \text{sec.}$	I_{FSM}	1.0	A
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	UNITS
I_R	$V_R=125\text{V}$		1.0	nA
I_R	$V_R=125\text{V}, T_A=150^\circ\text{C}$		3.0	μA
I_R	$V_R=180\text{V}$		10	nA
I_R	$V_R=180\text{V}, T_A=150^\circ\text{C}$		5.0	μA
BV_R	$I_R=5.0\mu\text{A}$	200		V
V_F	$I_F=1.0\text{mA}$	0.62	0.72	V
V_F	$I_F=10\text{mA}$	0.72	0.83	V
V_F	$I_F=50\text{mA}$	0.80	0.89	V
V_F	$I_F=100\text{mA}$	0.83	0.93	V
V_F	$I_F=200\text{mA}$	0.87	1.10	V
V_F	$I_F=300\text{mA}$	0.90	1.15	V
C_T	$V_R=0, f=1 \text{MHz}$		4.0	pF

SOD-523 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) CATHODE
- 2) ANODE

MARKING CODE: 3C

SYMBOL	DIMENSIONS			
	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)