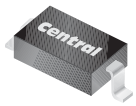
CMDD3003

SURFACE MOUNT
LOW LEAKAGE SILICON
SWITCHING DIODE

SUPERmini™



SOD-323 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMDD3003 type is a silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a **SUPER**mini™ surface mount package, designed for switching applications requiring a extremely low leakage diode.

MARKING CODE: 03C

MAXIMUM RATINGS: (T_A=25°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
Peak Forward Surge Current, tp=1.0μs	I_{FSM}	2.0	A
Peak Forward Surge Current, tp=1.0s	I_{FSM}	1.0	A
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

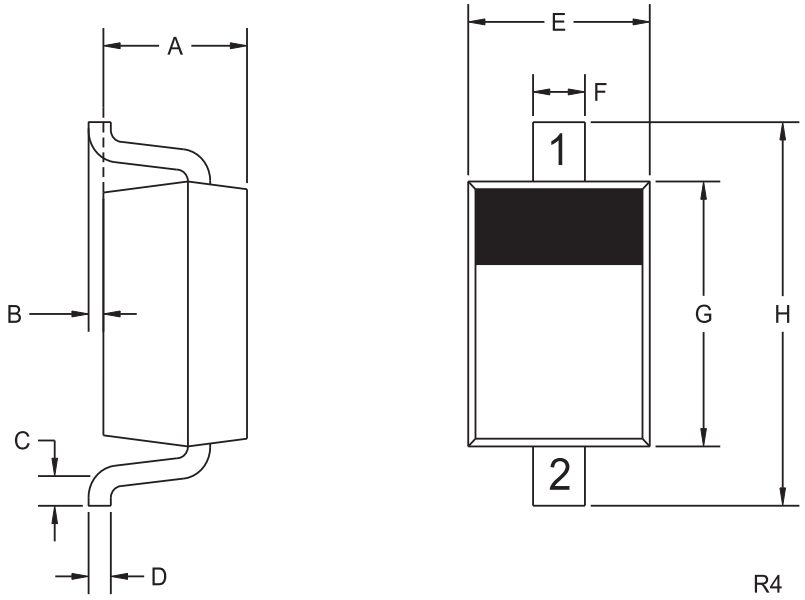
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**UNITS**
I_R	V_R=125V		1.0	nA
I_R	V_R=125V, T_A=150°C		3.0	μA
I_R	V_R=180V		10	nA
I_R	V_R=180V, T_A=150°C		5.0	μA
BV_R	I_R=5.0μA	200		V
V_F	I_F=1.0mA	0.62	0.72	V
V_F	I_F=10mA	0.72	0.83	V
V_F	I_F=50mA	0.80	0.89	V
V_F	I_F=100mA	0.83	0.93	V
V_F	I_F=200mA	0.87	1.10	V
V_F	I_F=300mA	0.90	1.15	V
C_T	V_R=0, f=1.0MHz		4.0	pF

CMDD3003

SURFACE MOUNT
LOW LEAKAGE SILICON
SWITCHING DIODE

SOD-323 CASE - MECHANICAL OUTLINE



R4

LEAD CODE:
1) CATHODE
2) ANODE

MARKING CODE: 03C

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)