

CMOD2005

SURFACE MOUNT
HIGH VOLTAGE
SILICON SWITCHING DIODE

ULTRAmini™



SOD-523 CASE



www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMOD2005 is a Silicon Switching Diode, manufactured by the epitaxial planar process, epoxy molded in a SOD-523 surface mount package, designed for applications requiring high voltage capability.

MARKING CODE: 25

MAXIMUM RATINGS: (T_A=25°C)

Continuous Reverse Voltage	V _R	300	V
Peak Repetitive Reverse Voltage	V _{RRM}	350	V
Average Forward Current	I _O	200	mA
Continuous Forward Current (T _L =90°C)	I _F	250	mA
Peak Repetitive Forward Current, t _p =1.0ms	I _{FRM}	1.0	A
Peak Forward Surge Current, t _p =1.0μs	I _{FSM}	4.5	A
Power Dissipation	P _D	250	mW
Power Dissipation (T _L =90°C)	P _D	500	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	Θ _{JA}	500	°C/W
Thermal Resistance	Θ _{JL}	120	°C/W

UNITS

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

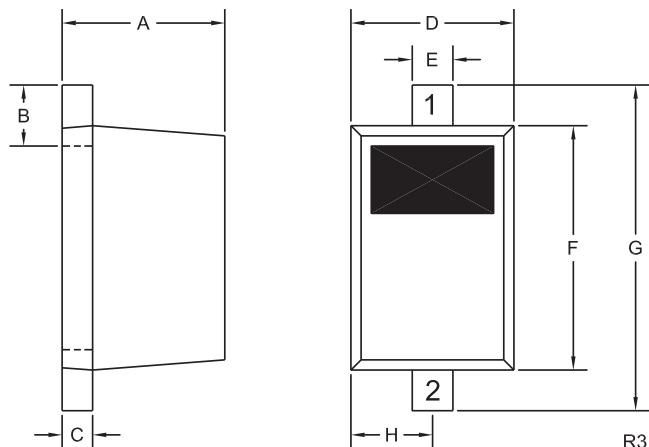
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _R	V _R =280V		100	nA
I _R	V _R =280V, T _A =150°C		100	μA
BV _R	I _R =100μA	350		V
V _F	I _F =20mA		0.87	V
V _F	I _F =100mA		1.0	V
V _F	I _F =200mA		1.25	V
C _T	V _R =0, f=1.0MHz		5.0	pF
t _{rr}	I _R =I _F =30mA, I _{rr} =3.0mA, R _L =100Ω		50	ns

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SOD-523 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: 25

SYMBOL	DIMENSIONS			
	INCHES	MILLIMETERS	MIN	MAX
A	0.020	0.031	0.50	0.80
B	0.008	0.016	0.20	0.40
C	0.002	0.008	0.05	0.20
D	0.028	0.035	0.70	0.90
E	0.008	0.014	0.20	0.35
F	0.039	0.055	1.00	1.40
G	0.055	0.071	1.40	1.80
H	0.016		0.40	

SOD-523 (REV: R3)

R3 (11-April 2011)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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