SURFACE MOUNT HIGH VOLTAGE SILICON SWITCHING DIODE



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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: (TA=25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	V_{R}	300	V
Peak Repetitive Reverse Voltage	V_{RRM}	350	V
Average Forward Current	IO	200	mA
Continuous Forward Current (T _L =90℃)	lF	250	mA
Peak Repetitive Forward Current, tp=1.0ms	IFRM	1.0	Α
Peak Forward Surge Current, tp=1.0µs	I _{FSM}	4.5	Α
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	$\Theta_{\sf JA}$	500	°C/W
Thermal Resistance	$\Theta_{\sf JL}$	120	°C/W

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

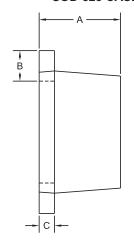
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{R}	V _R =280V		100	nA
I_{R}	V _R =280V, T _A =150°C		100	μΑ
BV_R	I _R =100μA	350		V
VF	I _F =20mA		0.87	V
VF	I _F =100mA		1.0	V
V_{F}	I _F =200mA		1.25	V
C _T	V _R =0, f=1.0MHz		5.0	pF
t _{rr}	$I_R=I_F=30$ mA, $I_{rr}=3.0$ mA, $R_L=100$ Ω		50	ns

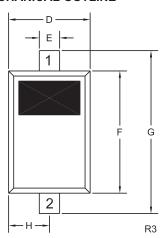
CMOD2005





SOD-523 CASE - MECHANICAL OUTLINE





LEAD CODE:

- 1) Cathode 2) Anode
- MARKING CODE: 25

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.020	0.031	0.50	0.80			
В	0.008	0.016	0.20	0.40			
С	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			
Н	0.016		0.40				

SOD-523 (REV: R3)

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

CONTACT US

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