



Plastic-Encapsulate Diodes

FAST SWITCHING DIODE

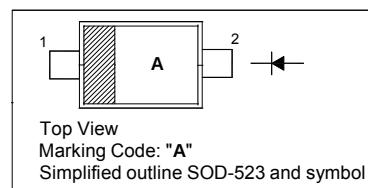
FEATURES

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion

MARKING:A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

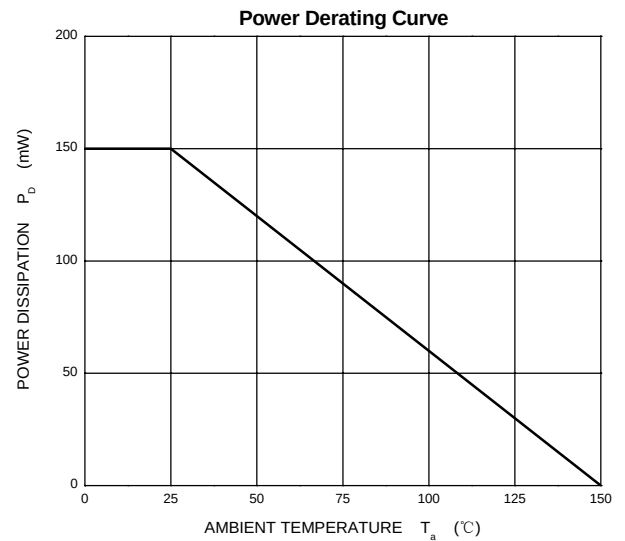
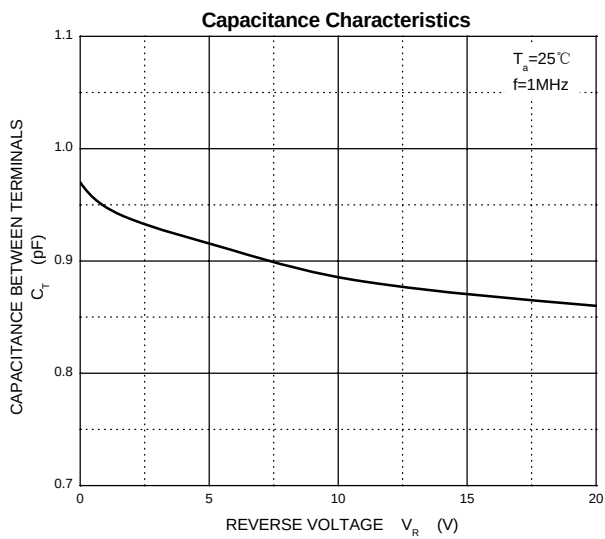
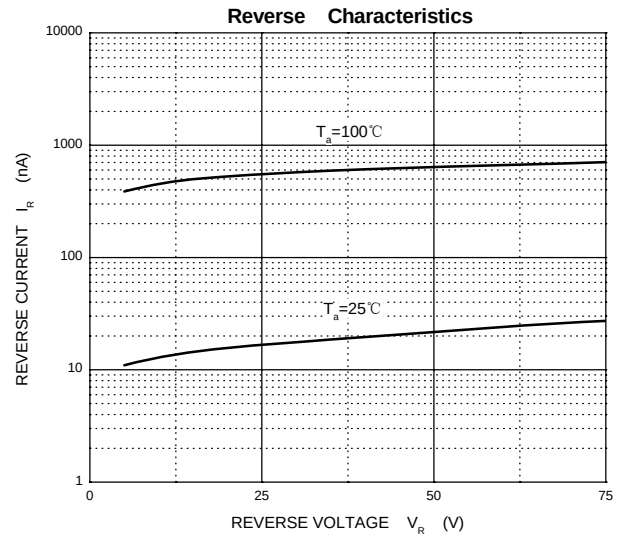
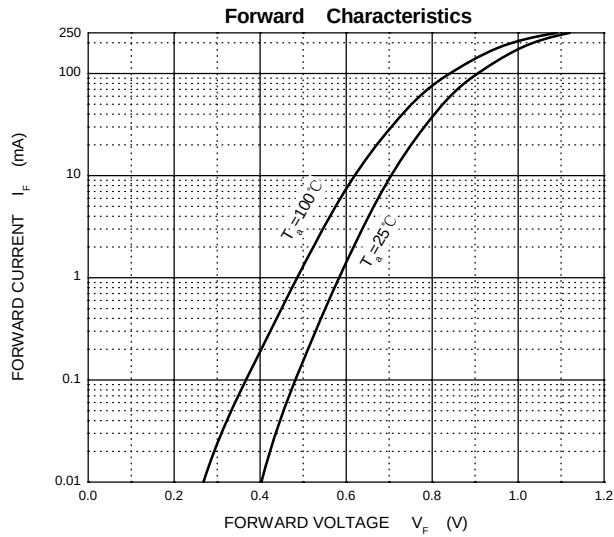


MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Peak Repetitive Reverse Voltage	75	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_O	Average Rectified Output Current	250	mA
I_{FSM}	Peak Forward Surge Current @ $t=1\mu\text{s}$	4	A
	Peak Forward Surge Current @ $t=1\text{s}$	0.5	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	833	$^{\circ}\text{C/W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

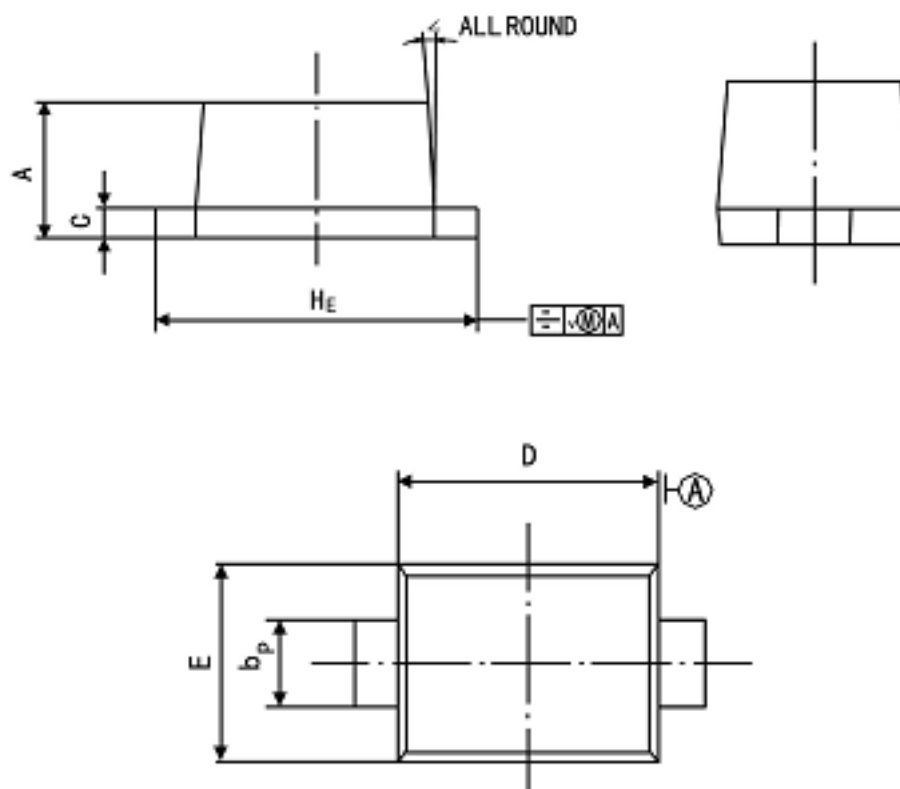
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	75			V
Reverse current	I_R	$V_R=25\text{V}$			30	nA
		$V_R=75\text{V}$			1	μA
Forward voltage	V_F	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	V
		$I_F=50\text{mA}$			1	V
		$I_F=150\text{mA}$			1.25	V
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$			1	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R, R_L=100\Omega$			4	ns



**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

SOD-523

Symbol	Dimension in Millimeters	
	Min	Max
A	0.60	0.70
bp	0.30	0.40
C	0.100	0.14
D	1.15	1.25
E	0.75	0.85
HE	1.50	1.70
V	—	0.10
∠	—	5°