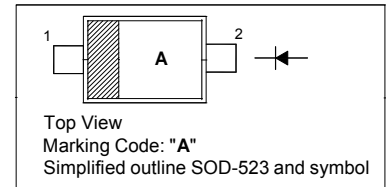


Plastic-Encapsulate Diodes
FAST SWITCHING DIODE
FEATURES

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

PINNING

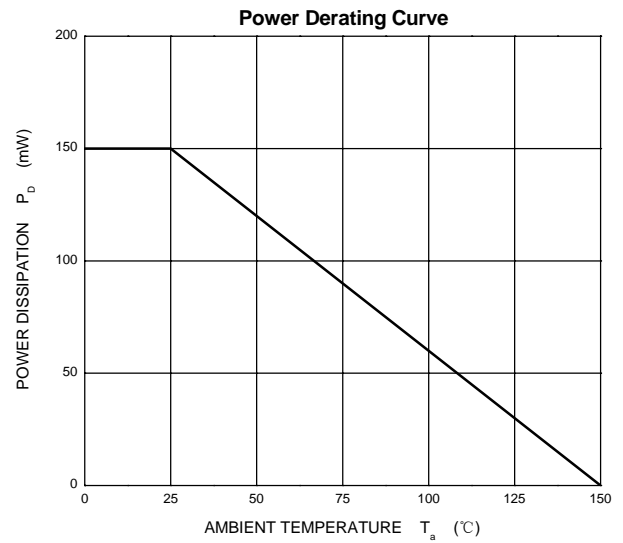
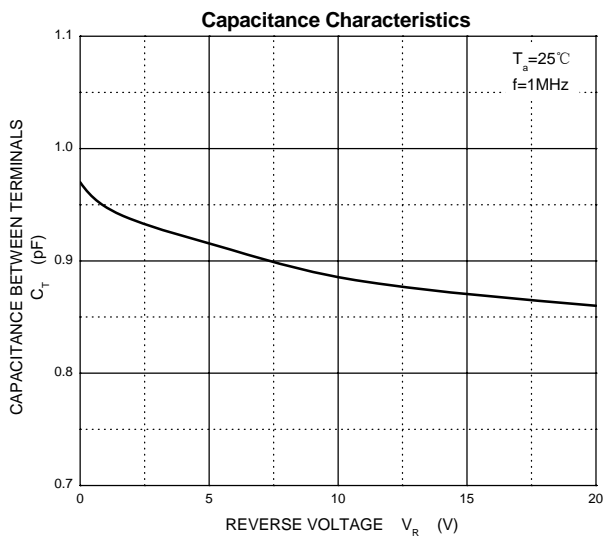
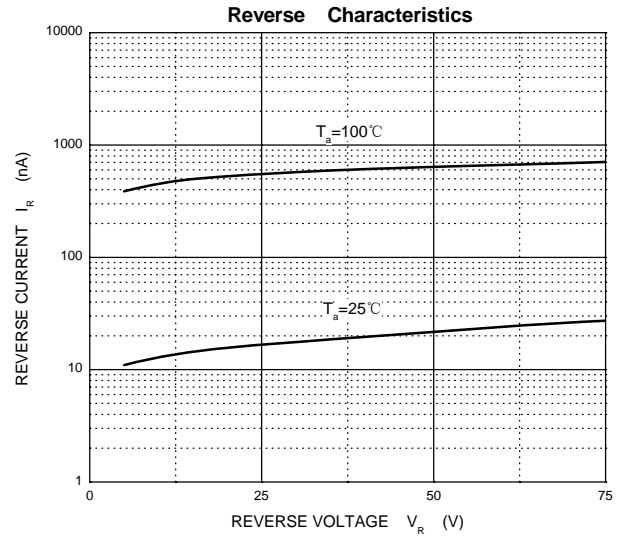
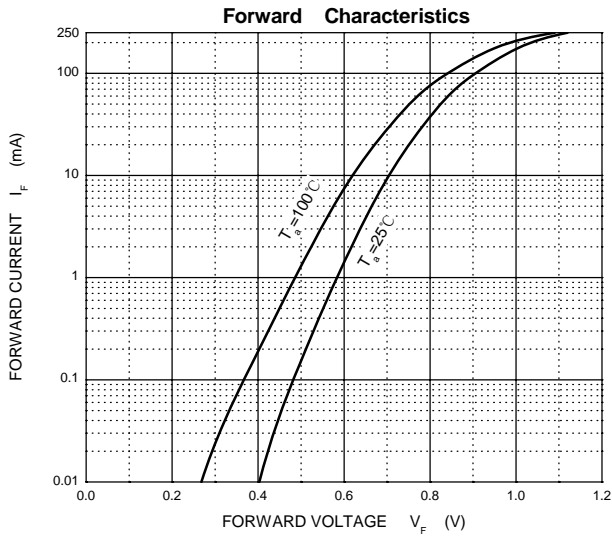
PIN	DESCRIPTION
1	Cathode
2	Anode


MARKING:A
MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

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

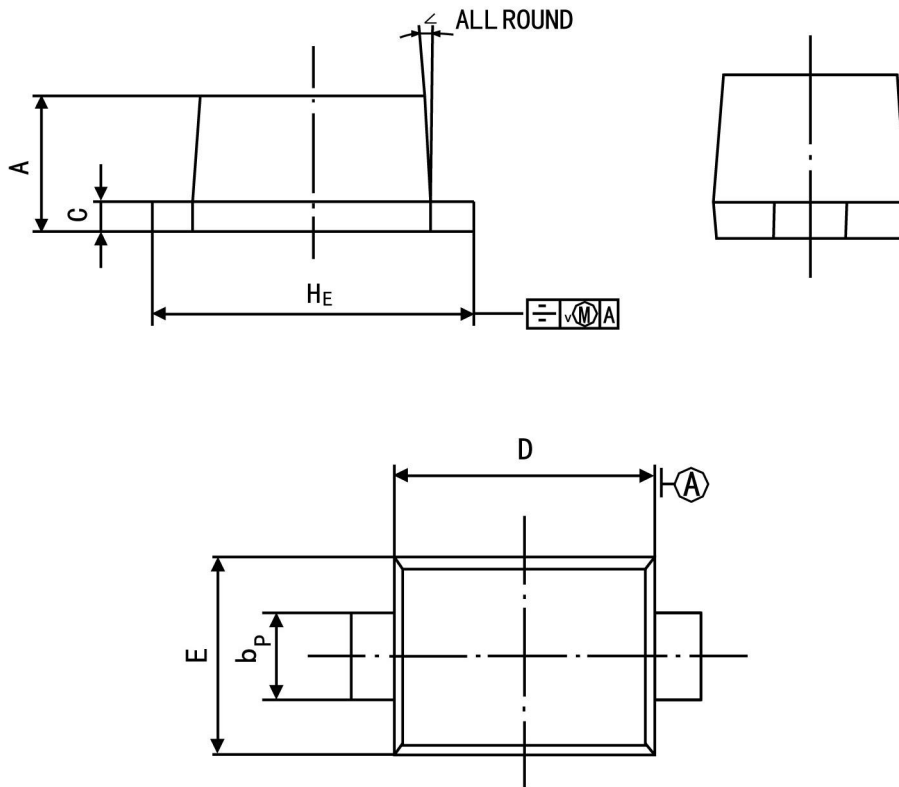
ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

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



Package Outline SOD-523

Plastic surface mounted package; 2 leads



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°

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-523	Tape/Reel, 7" reel	3000	EIA-481-1