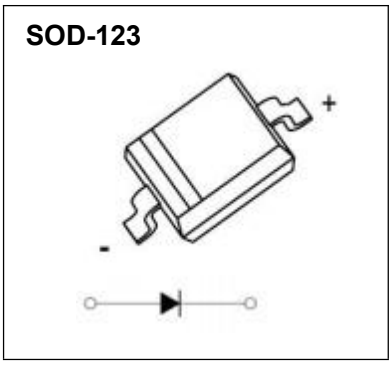
Plastic-Encapsulate Diodes

SWITCHING DIODE



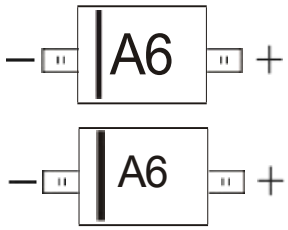
FEATURES

- Very Small Plastic Package
- High Switching Speed

APPLICATIONS

- High-Speed Switching in e.g. Surface Mounted Circuits

MARKING: A6 ▪



The marking bar indicates the cathode
Soliddot = Green molding compound device, if none,the normal device.

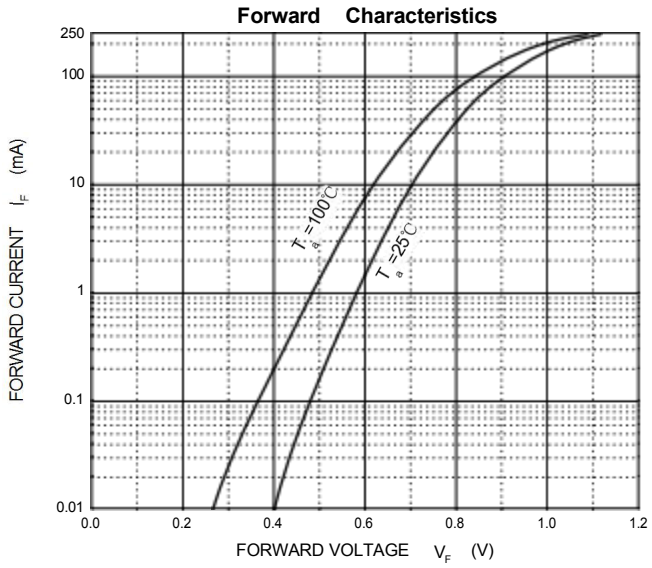
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

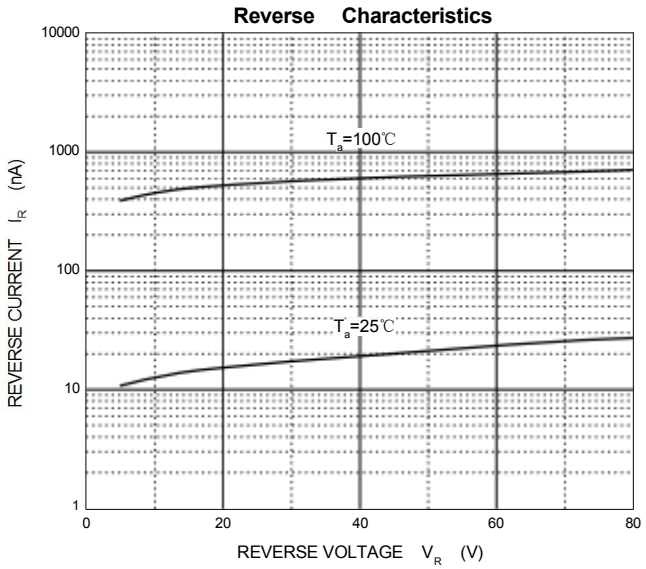
Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	85	V
V_R	DC Blocking Voltage	75	
I_O	Continuous Forward Current	250	mA
I_{FSM}	Non-repetitive Peak Forward SurgeCurrent@t= 8.3ms	2.0	A
P_D	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

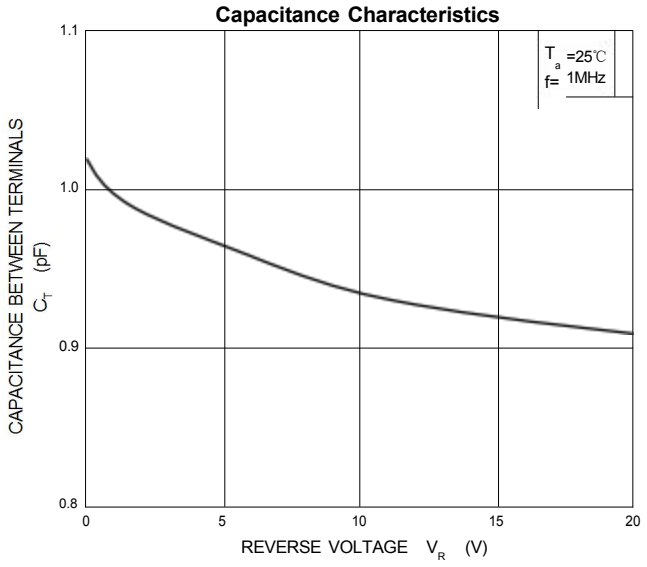
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise specified)

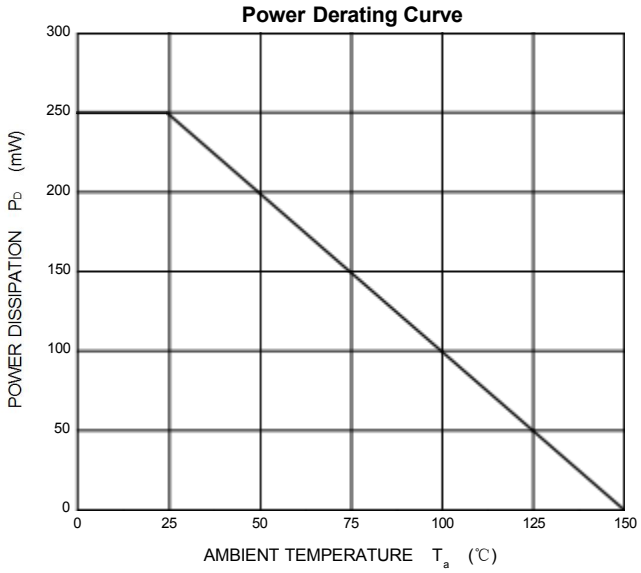
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=100μA	100			V
Reverse current	I_R	V_R=25V			30	nA
		V_R=75V			1	μA
Forward voltage	V_F	I_F=1mA			0.715	V
		I_F=10mA			0.855	
		I_F=50mA			1	
		I_F=150mA			1.25	
Total capacitance	C_{tot}	V_R=0V,f=1MHz			1.5	pF
Reverse recovery time	t_{rr}	I_F= I_R=10mA, I_{rr}=0.1×I_R			4	ns

Typical Characteristics



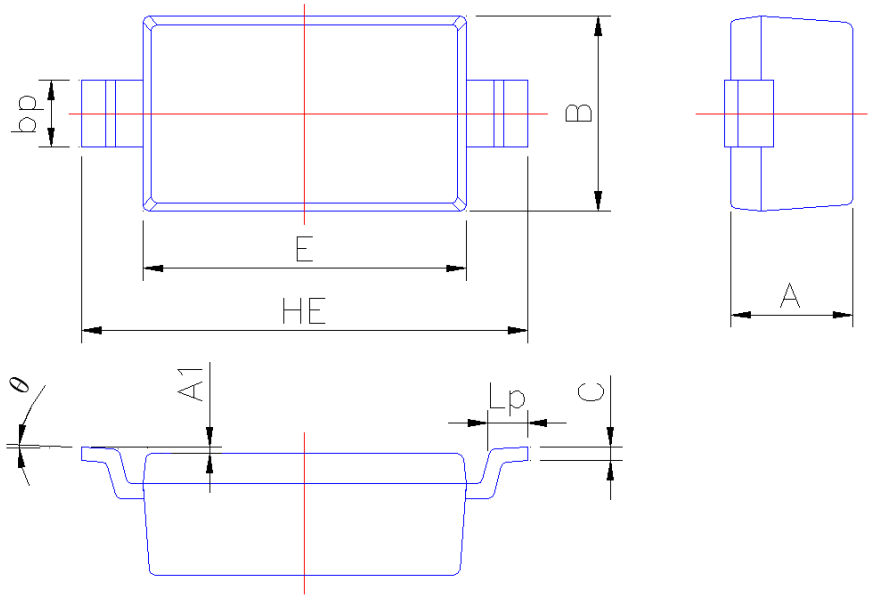






PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-123**



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.15
A1	0.01	0.100
B	1.55	1.65
bp	0.50	0.70
C	0.09	0.150
E	2.60	2.70
HE	3.45	3.85
Lp	0.20	0.45
θ	0°	5°