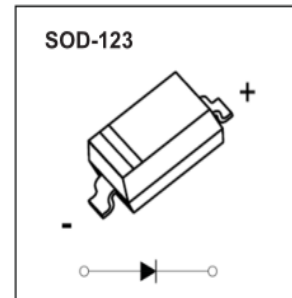


**SOD-123 Plastic-Encapsulate Diodes**
**FEATURES**

Low Forward Voltage Drop  
 Guard Ring Construction for Transient Protection  
 High Conductance  
 Also Available in Lead Free Version


**MARKING:SE**

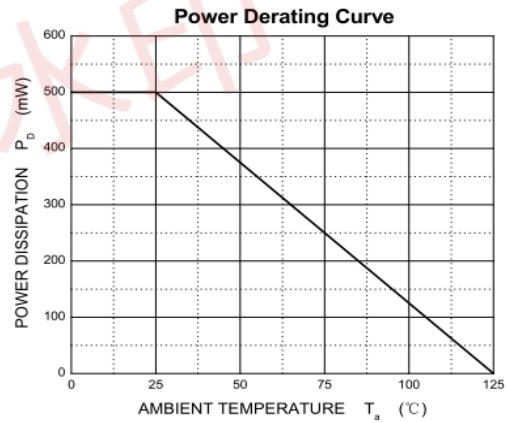
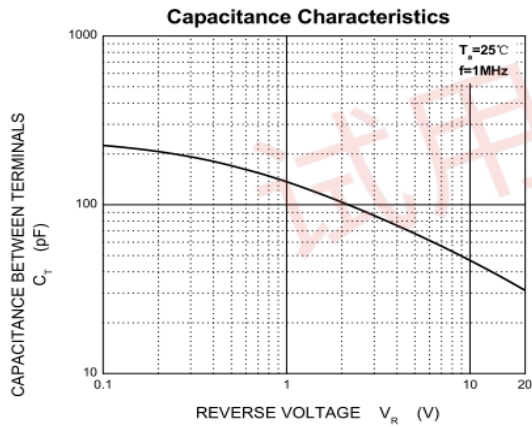
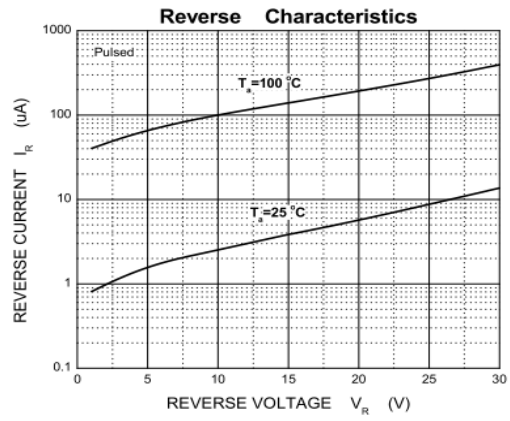
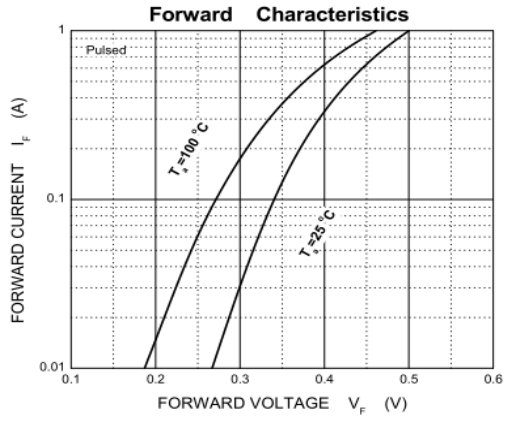
**Maximum Ratings @Ta=25°C**

Parameter	Symbol	Value	Unit
Peak repetitive peak reverse voltage	$V_{RRM}$		
Working peak reverse voltage	$V_{RWM}$	40	V
DC blocking voltage	$V_R$		
RMS reverse voltage reverse voltage (DC)	$V_{R(RMS)}$	21	V
Average rectified output current	$I_o$	0.5	A
Non-repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	5.5	A
Power dissipation	$P_D$	500	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	200	°C/W
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{STG}$	-55~+150	°C
Voltage rate of change	dv/dt	1000	V/μs

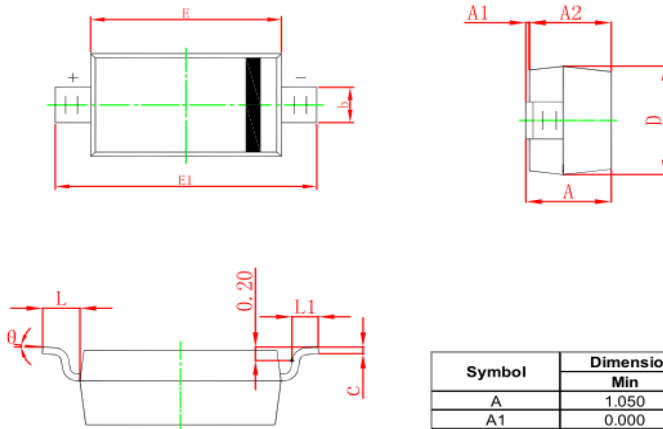
**Electrical Characteristics @Ta=25°C**

	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=200\mu A$	40			V
Reverse current	$I_R$	$V_R=15V$			20	μA
		$V_R=30V$			130	
Forward voltage	$V_F$	$I_F=0.1A$			0.375	V
		$I_F=0.5A$			0.430	
Capacitance between terminals	$C_T$	$V_R=1, f=1MHz$		170		pF

# Typical Characteristics

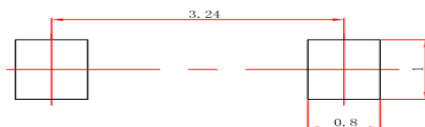


## SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

## SOD-123 Suggested Pad Layout



**Note:**  
 1. Controlling dimension: in millimeters.  
 2. General tolerance: ± 0.05mm.  
 3. The pad layout is for reference purposes only.