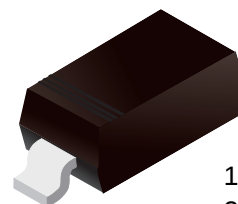


■ Features

- Low Forward Voltage Drop
- Fast Switching
- Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Available in Lead Free Version



1.Cathode
2.Anode

■ Simplified outline(SOD-123)

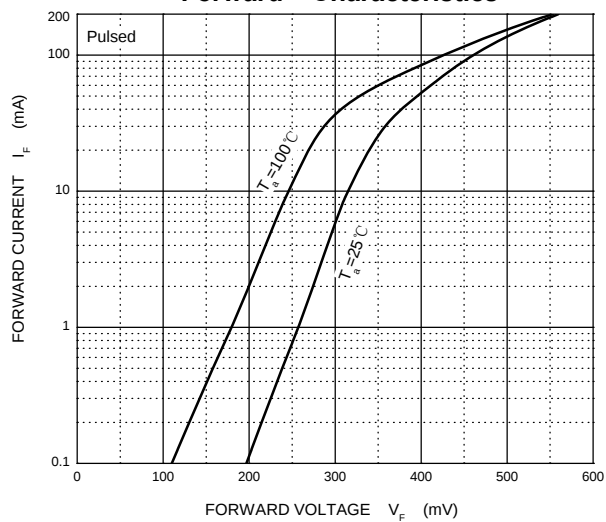
■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Limit	Unit
DC blocking voltage	V_R	30	V
RMS reverse voltage	$V_{R(RMS)}$	21	
Average rectified output current	I_o	100	mA
Forward continuous current	I_F	200	mA
Repetitive peak forward current	I_{FRM}	300	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	600	mA
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 range	T_{STG}	-55~+150	°C

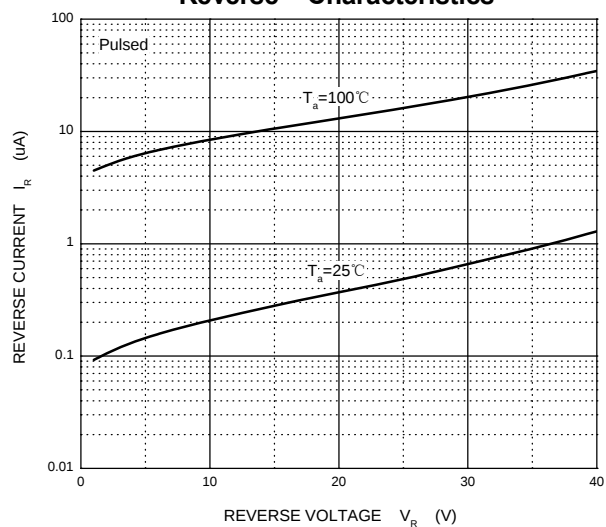
■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	30			V
Forward voltage	V_{F1}	$I_F=0.1mA$			240	mV
	V_{F2}	$I_F=1.0mA$			320	mV
	V_{F3}	$I_F=10mA$			400	mV
	V_{F4}	$I_F=30mA$			500	mV
	V_{F5}	$I_F=100mA$			1000	mV
Reverse current	I_R	$V_R=25V$			2.0	μA
Reverse recovery time	t_{rr}	$I_F=10mA, I_R=10mA$ to 1mA , $R_L=100\Omega$			5.0	ns
Capacitance between terminals	C_T	$V_R=1V, f=1MHz$			10	pF

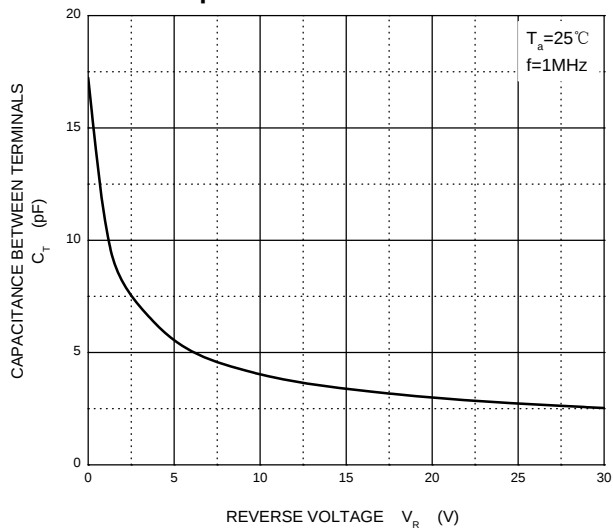
Forward Characteristics



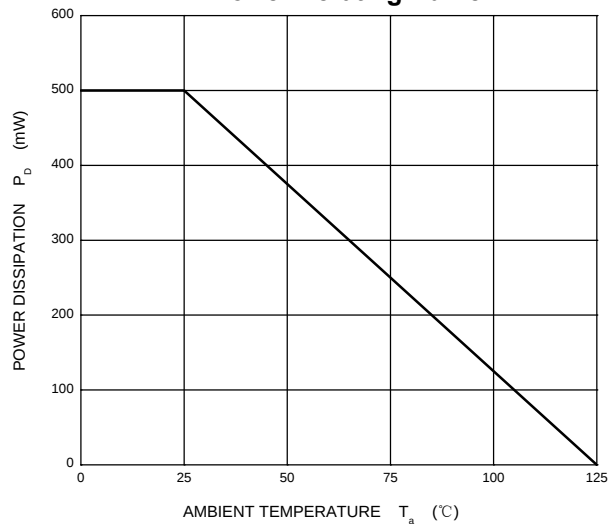
Reverse Characteristics



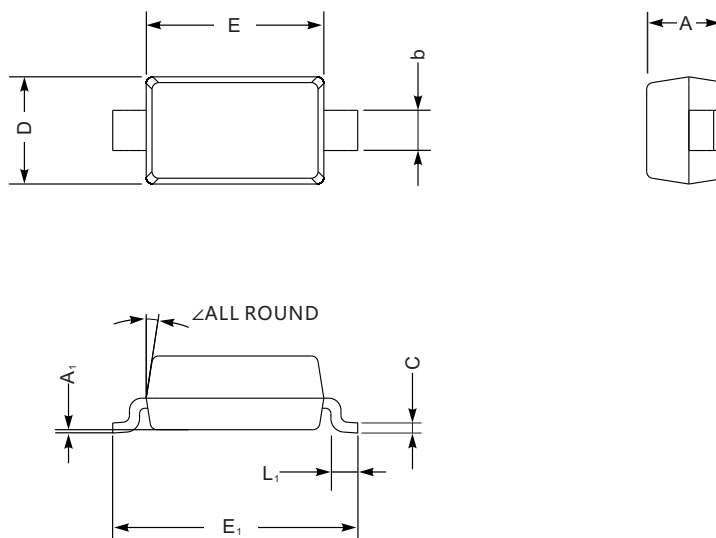
Capacitance Characteristics



Power Derating Curve



■ SOD-123



SOD-123 mechanical data

UNIT		A	C	D	E	E ₁	L ₁	b	A ₁	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	

■ The recommended mounting pad size

