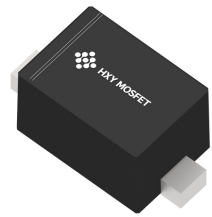




## Features

- Extremely small surface mounting type.
- Small package.
- High speed and high reliability



SOD-523



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAT41KFILM	SOD-523	6	3000

## Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	90	V
DC Reverse voltage	$V_R$	80	V
Continuous forward current	$I_F$	225	mA
Surge current	$I_{FSM}$	0.5	A
Total power dissipation	$P_{tot}$	150	mW
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55-125	°C

## Electrical Characteristics(Ta=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$			1.2	V	$I_F=100mA$
Reverse current	$I_R$			20	$\mu A$	$V_R=80V$
Diode capacitance	$C_d$		0.72	3.0	pF	$V_R=0.5V, f=1MHz$
Reverse recovery time	$t_{rr}$			4	ns	$V_R=6V, I_F=10mA, R_L=100\Omega$



## Typical Characteristics

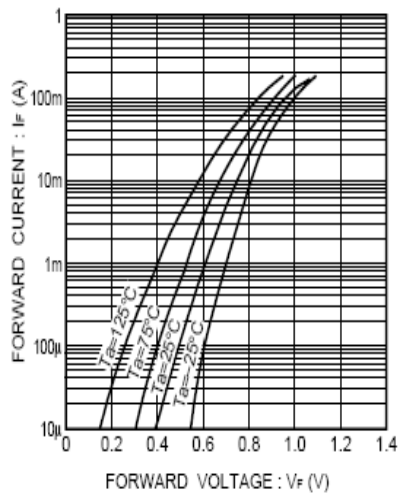


Fig.1 Forward characteristics

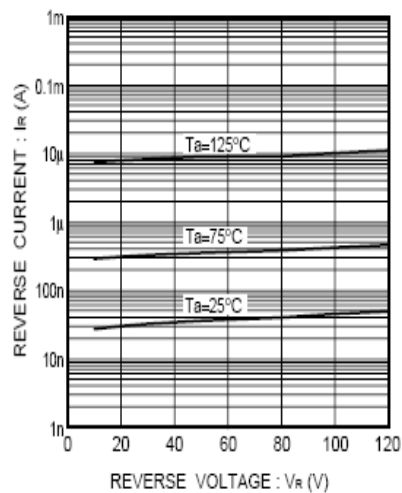


Fig.2 Reverse characteristics

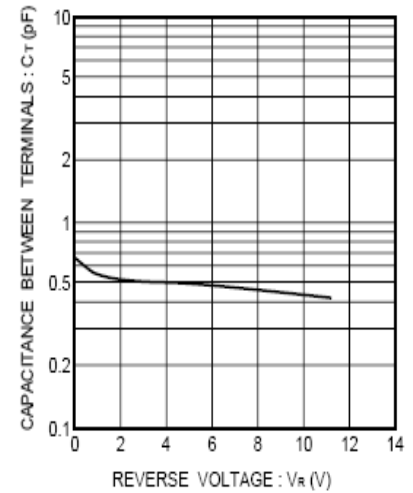


Fig.3 Capacitance between terminals

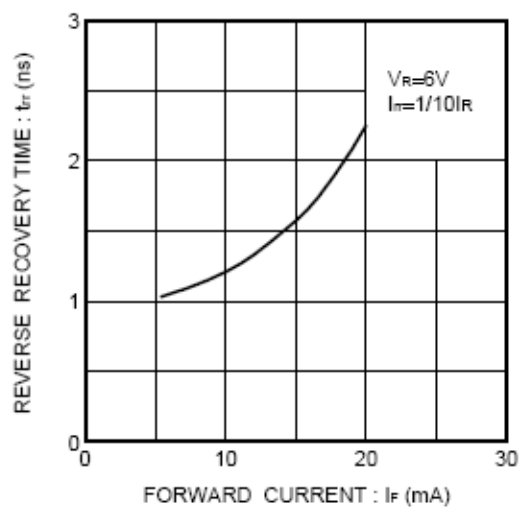


Fig.4 Reverse recovery time characteristics

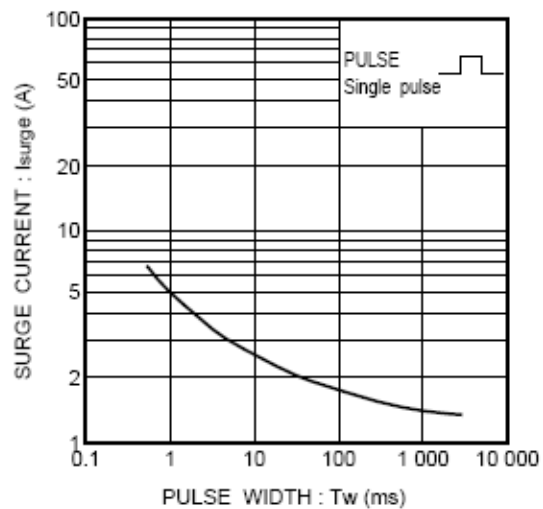
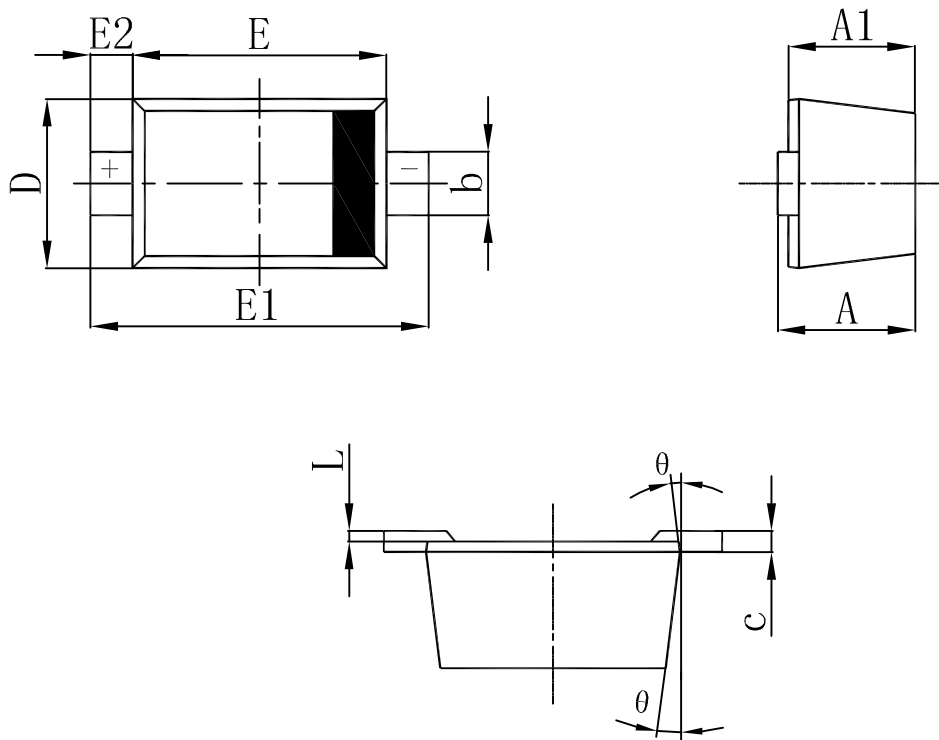


Fig.5 Surge current characteristics



SOD-523 Package Outline Dimensions



Sym ol	imensions In Millimeters		imensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	



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