

BAS516

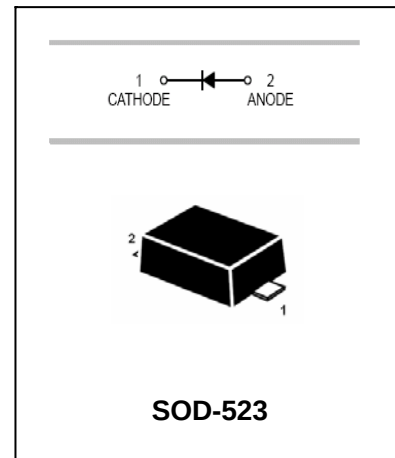
High speed Switching Diode

FEATURES

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

APPLICATIONS

- High speed switching.

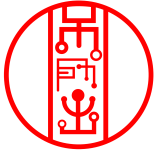


MAXIMUM RATING @ Ta=25°C unless otherwise specified

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	μA	$V_R=80V$
Diode capacitance	C_d		0.72	3.0	pF	$V_R=0.5V, f=1MHz$
Reverse recovery time	t_{rr}			4	ns	$V_R=6V, I_F=10mA, R_L=100\Omega$



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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

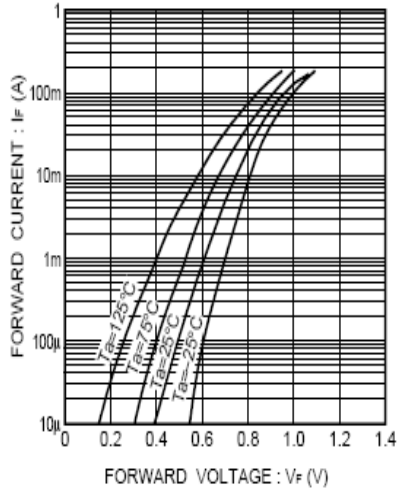


Fig.1 Forward characteristics

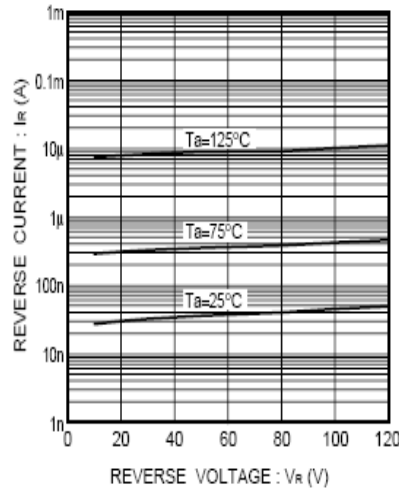


Fig.2 Reverse characteristics

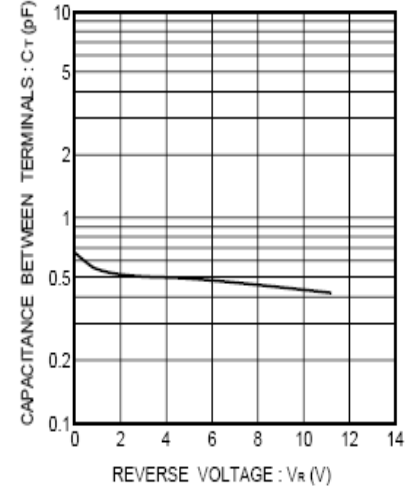


Fig.3 Capacitance between terminals

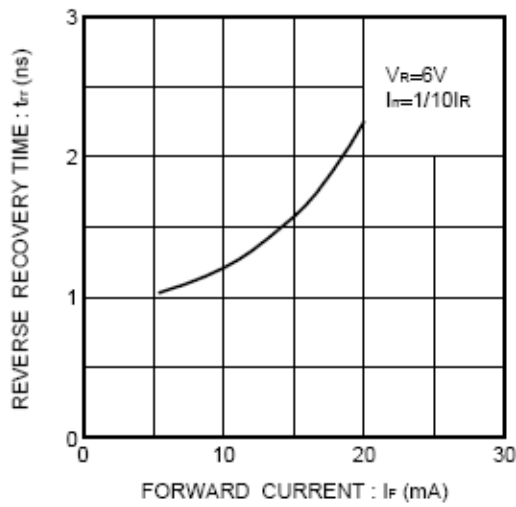


Fig.4 Reverse recovery time characteristics

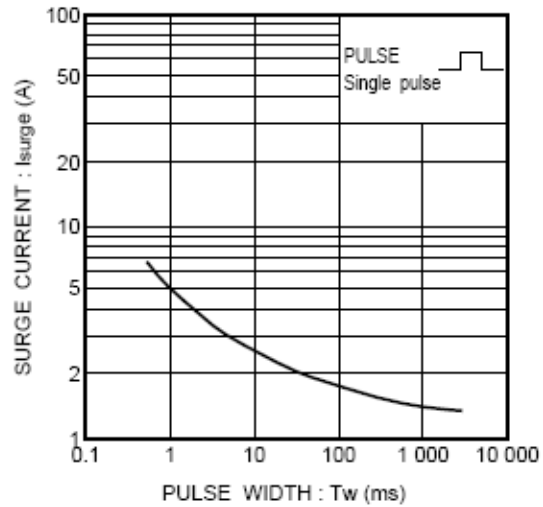
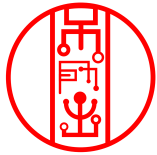


Fig.5 Surge current characteristics

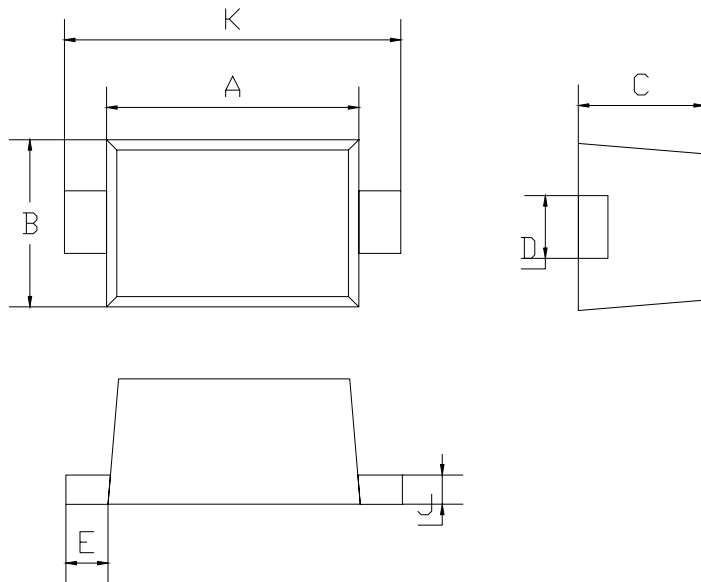


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PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOD-523		
Dim	Min	Max
A	1.1	1.3
B	0.7	0.9
C	0.5	0.7
D	0.25	0.35
E	0.15	0.25
J	0.1 Typical	
K	1.5	1.7
All Dimensions in mm		

SOLDERING FOOTPRINT

