

Features

- Fast switching devices
- SOD523 Micro SMD package
- RoHS compliant / Green EMC
- Matte tin (Sn) lead finish
- Cathode band / Device marking
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications
- High conductance



SOD-523



Schematic Diagram

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Non-Peak Repetitive Reverse Voltage	V _{RM}	70	V
Repetitive Peak Reverse Voltage	V _{RRM}	70	V
Forward Continuous Current	I _{FM}	70	mA
Non-Repetitive Peak Forward Surge Current (t=8.3ms)	I _{FSM}	200	mA
Power Dissipation	P _D	200	mW
Junction Temperature	T _J	125	°C
Storage Temperature	T _{STG}	-50 to +125	°C

Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Breakdown Voltage	V _{BR}	I _R =10uA	70	-	-	V
Forward Voltage	V _F	I _F =1mA	-	-	0.41	V
		I _F =15mA	-	-	1	V
Reverse Current	I _R	V _R =50V	-	-	0.1	μA
Capacitance	C _T	V _R =0V, F=1MHz	-	-	2	pF
Reverse Recovery Time	t _{rr}	I _F =I _R =10mA, I _{RR} =1mA, R _L =100Ω	-	-	5	ns

Typical Characteristic Curves

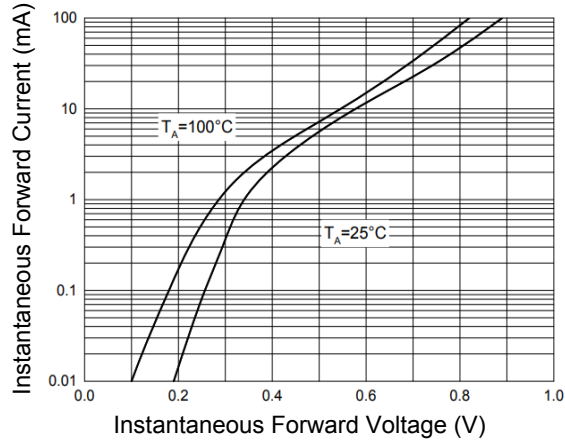


Figure 1. Typical Instantaneous Forward Characteristics

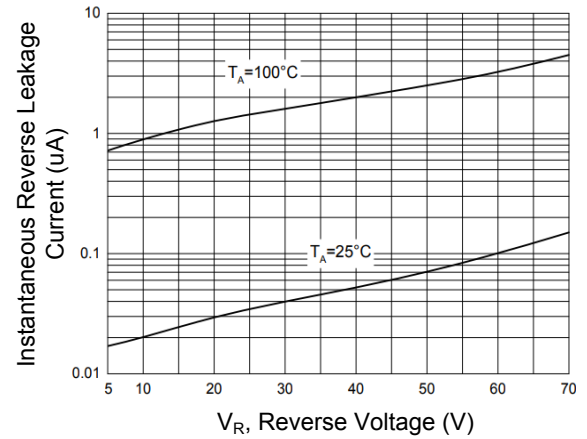


Figure 2. Typical Reverse Leakage Characteristics

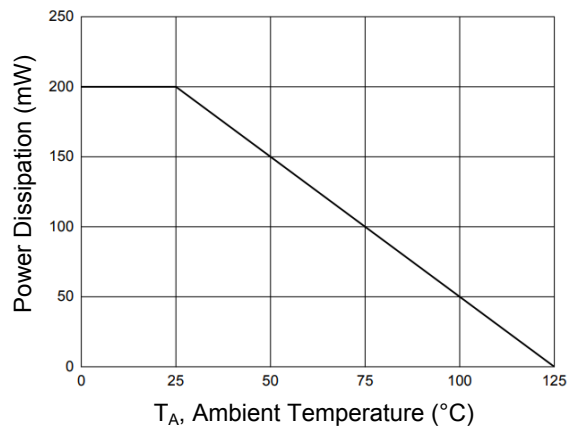
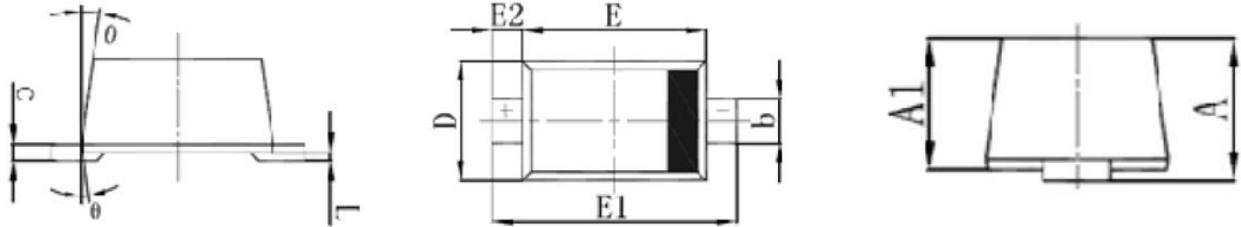


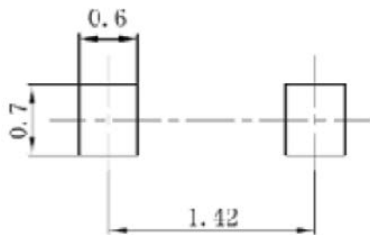
Figure 3. Power Derating Curve

Package Outline Dimension (SOD-523)



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.030
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	0.000	0.003
θ	7° REF		7° REF	

Recommended Pad Layout



Note:
1. Unit: mm

Order Information

Device	Package	Marking	Carrier	Quantity
BAS70S	SOD-523	K73	Tape & Reel	8,000 pcs / 7" Reel