



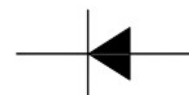
1. Features

SOD323

- High-speed switching

2. Mechanical Data

- Case:Molded Plastic,SOD323 .
- Epoxy:UL 94V-0 rate flame retardant.
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking:A6.
- Marking:marked on body.



3. Maximum Ratings

Electrical Characteristics Rating at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	100	V
Continuous Forward Current	I_F	250	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Current	I_{FSM}	4	A
		1	
		0.5	
Total Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-65 to+150	°C

4. Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameters	Symbol	Cindition	Min	TYP	Max	Unit
Forward Voltage	VF	IF = 1 mA	-	-	0.715	V
		IF = 10 mA			0.855	
		IF = 50 mA			1	
		IF = 150 mA			1.25	
Reverse Current	IR	VR = 25 V	-	-	30	nA
		VR = 75 V			1	uA
		VR = 25 V, TJ = 150°C			30	uA
		VR = 75 V, TJ = 150°C			50	uA
Diode Capacitance	Ctot	VR = 0 V, f = 1 MHz	-	-	1.5	pF
Reverse Recovery Time	trr	IF=IR=10mA,Irr=0.1IR, RL=100Ω	-	-	4	ns



5. Rating And Characteristic Curves

Fig.1 Maximum forward current of soldering point temperature.

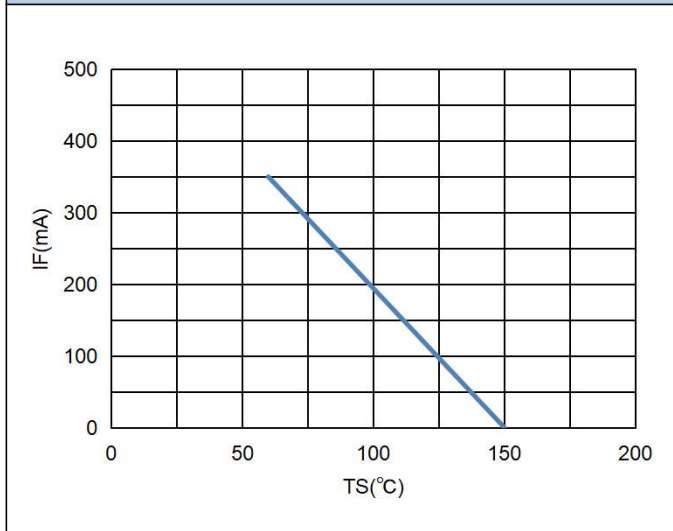


Fig.2 Forward current as a function of forward voltage.

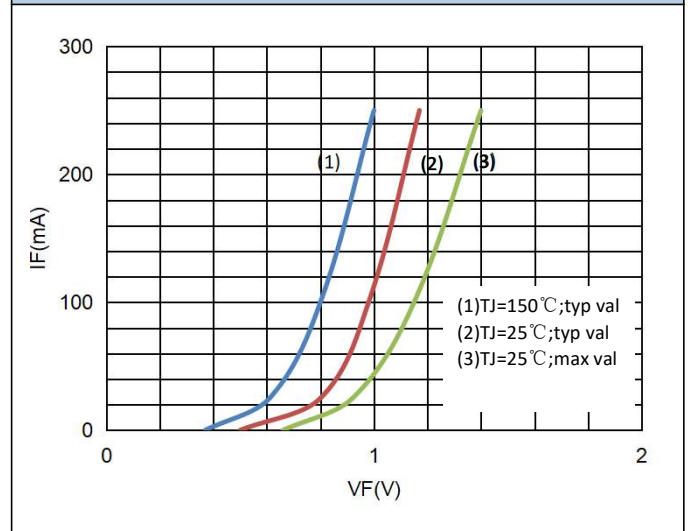


Fig.3 Maximum peak forward current of pulse duration.

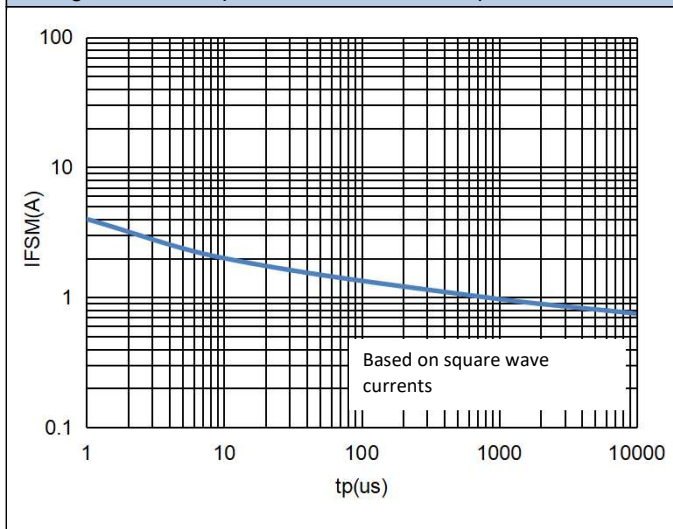


Fig.4 Reverse current as a function of junction temperature.

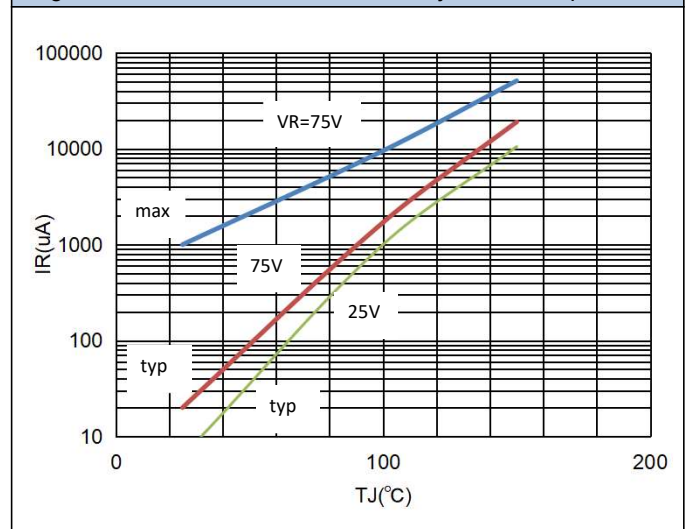
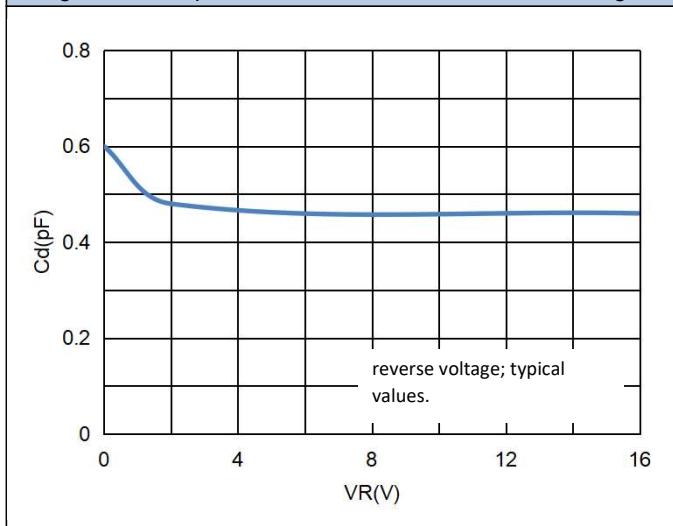
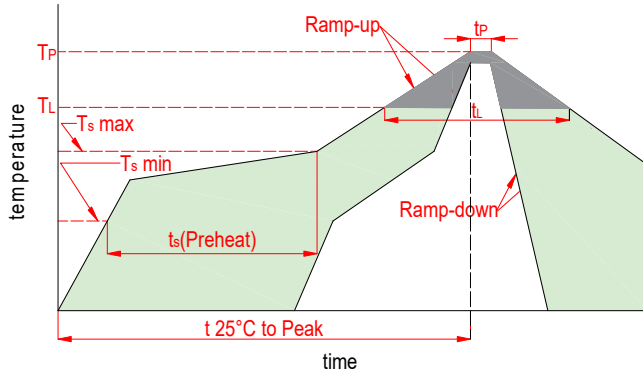


Fig.5 Diode capacitance as a function of reverse voltage.



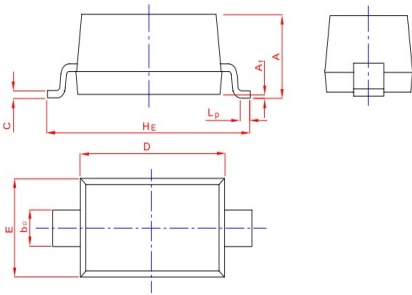


6. Soldering Parameters



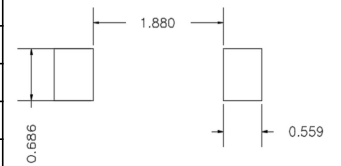
Reflow Condition		Lead-free
Pre Heat	Temp. min(T_s (min))	150℃
	Temp. max(T_s (min))	200℃
	Time(min to max)(t_s)	60~120s
Aver. ramp up rate(Liquidus Temp.)(T_L)to peak		3℃/s max
T_s (max) to T_L -Ramp-up Rate		3℃/s max
Reflow	Temp.(T_L)(Liquidus)	217℃
	Temp.(t_L)(Liquidus)	60~150s
Peak Temp.(T_P)		260 ^{+0/-5} ℃
Time within actual peak Temp.(t_p)		30s max
Ramp-down Rate		6℃/s max
Time 25℃ to peak Tempe.(T_p)		8 minutes max
Do not exceed		260℃

7. Dimensions

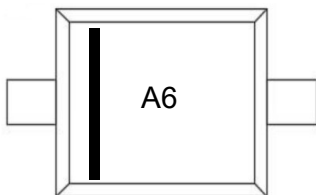


Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.031	0.047	0.800	1.200
bp	0.010	0.016	0.250	0.400
C	0.003	0.006	0.080	0.150
D	0.063	0.071	1.600	1.800
E	0.045	0.055	1.150	1.400
HE	0.091	0.110	2.300	2.800
A1	0.000	0.004	0.010	0.100
Lp	0.008	0.020	0.200	0.500

Mounting PAD Layout



8. Part Marking System



9. Package Information

Package	Type	Tape Width (mm)	Quantity(pcs)
SOD323	BAS316WS	8	3000



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