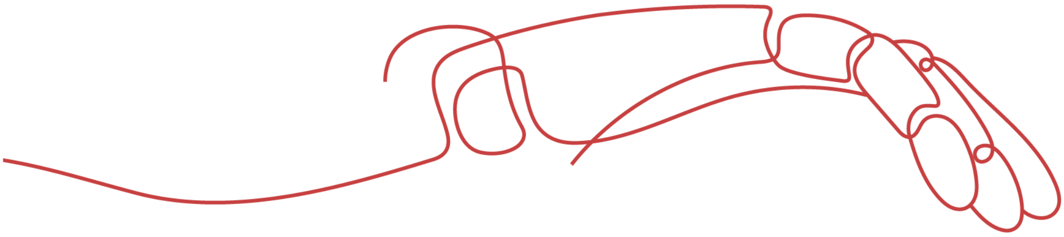
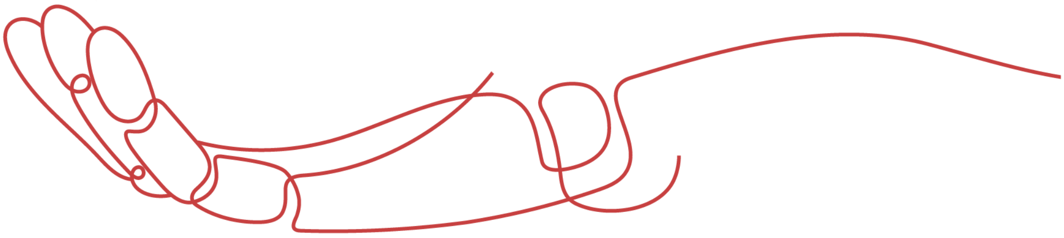
JG Techology



PRODUCT DATA SHEET



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Datasheet Resources Samples

Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

Feature

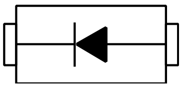
- Ultra Small mold type. (SOD-123)
- Low I_R
- High reliability.

Construction

- Silicon epitaxial planar

Applications

- Low current rectification



Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260℃
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 um
- Pin flatness:≤3mil

Electrical characteristics per line@25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.41	V	I_F=1A
Reverse current	I_R	-	-	1	mA	V_R=40V

Absolute maximum rating@25℃

Parameter	Symbol	limits	Unit
Reverse voltage (DC)	V_{RM}	40	V
Average rectified forward current	I_o	1	A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	25	A
Operating Junction temperature Range	T_j	-55 to 125	℃
Storage temperature	T_{stg}	-55 to +125	℃

Typical Characteristics

Fig.1 Forward Current Derating Curve

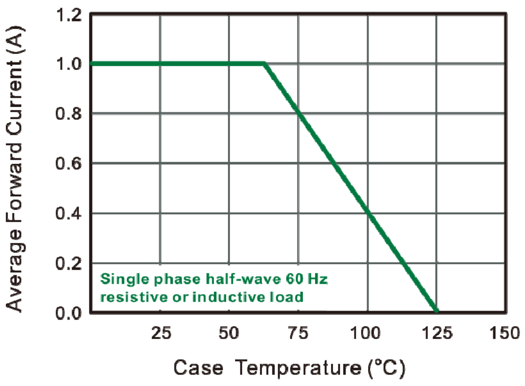


Fig.2 Typical Reverse Characteristics

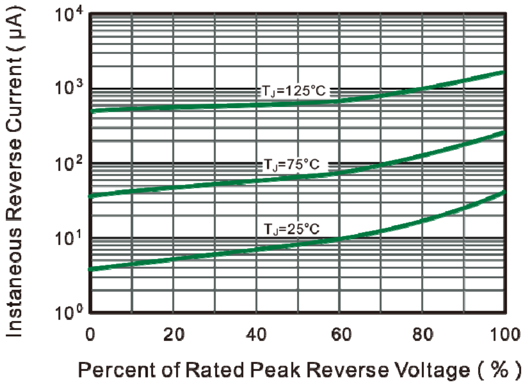


Fig.3 Typical Forward Characteristic

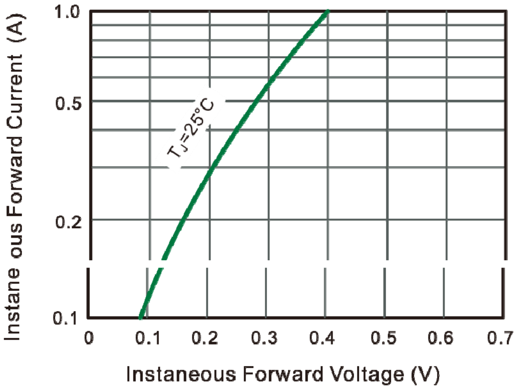


Fig.4 Typical Junction Capacitance

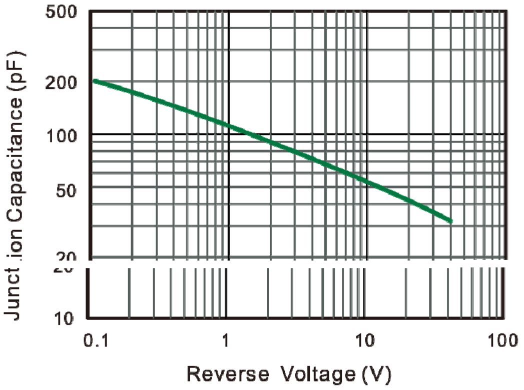
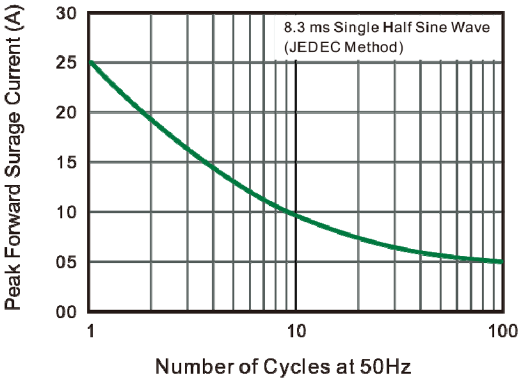
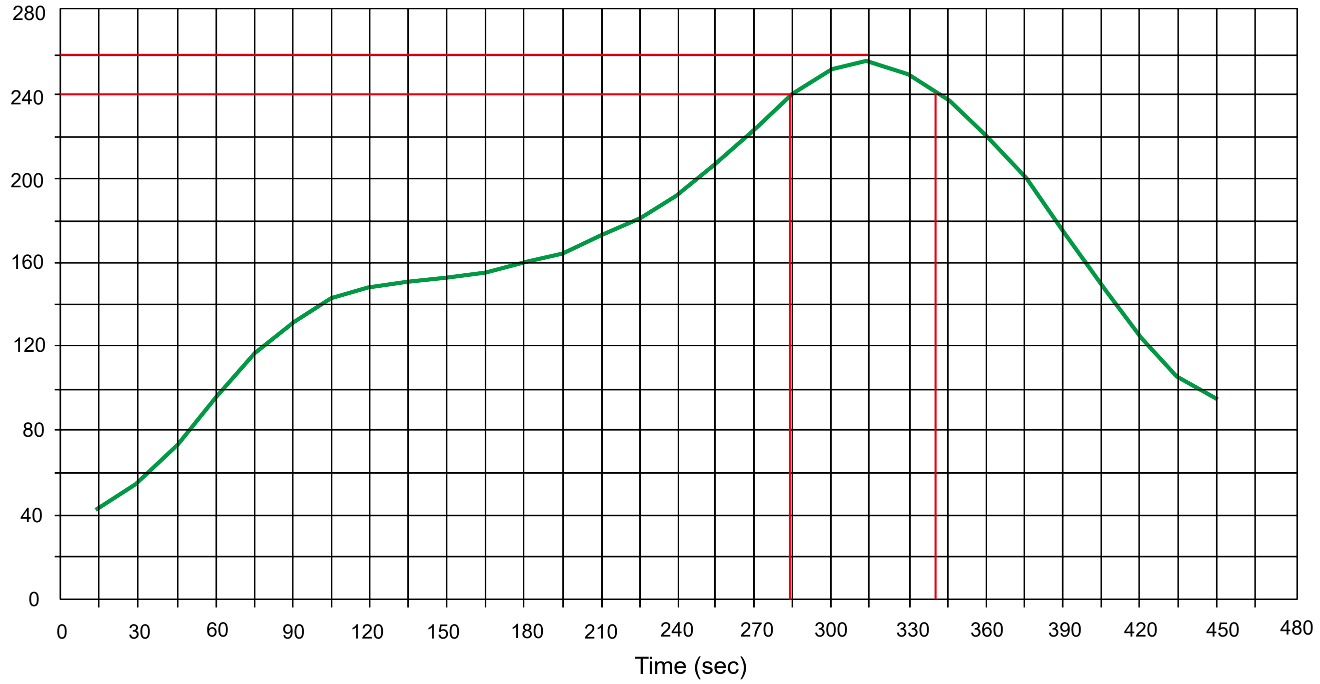


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

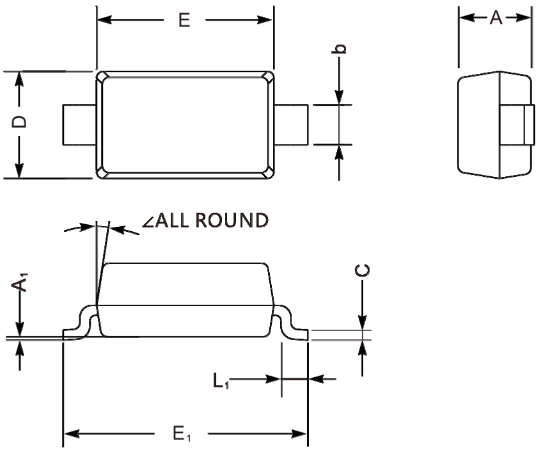


Solder Reflow Recommendation

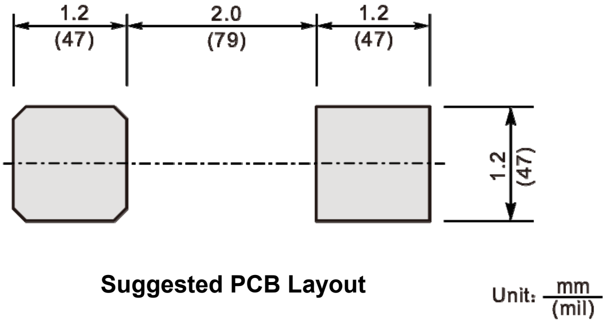
Peak Temp=257℃, Ramp Rate=0.802deg. ℃/sec



Product dimension (SOD-123)



Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.90	1.30	0.035	0.051
C	0.09	0.22	0.0035	0.0087
D	1.50	1.80	0.059	0.071
E	2.50	2.80	0.098	0.110
E_1	3.60	3.90	0.142	0.154
L_1	0.25	0.45	0.010	0.018
B	0.50	0.70	0.020	0.028
A_1	-	0.20	-	0.008
∠	9°			



Suggested PCB Layout

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