S7116-300A

SURFACE MOUNT GENERAL RECTIFIER

Features

- Ultra Small mold type. (SOD323)
- Low VF; Low IR.
- High reliability.

Applications

- Low current rectification

Construction

- Silicon epitaxial planar

Mechanical Characteristics

- Mounting position: Any

SOD323

Pin Configuration

Circuit Diagram

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

Parameter	**Symbol**	**Value**	**Unit**
Reverse voltage(repetitive peak)	V_{RM}	45	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_o	1	A
Peak forward current(Pulse Width=1us, Single Pulse)	I_{PK}	25	A
Peak forward surge current(8.33ms 1/2sine waveform with single pulse)	I_{FSM}	8	A
Power Dissipation	PD	500	mW
Operating Junction temperature Range	TJ	−55 to +125	°C
Storage Temperature Range	Tstg	−55 to +125	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	--	0.5	0.55	V	I_F= 1A
Forward voltage	V_F	--	0.43	0.48	V	I_F= 0.5A
Reverse current	I_R	--	--	0.1	mA	V_R=40V
Junction Capacitance	Cj	--	120	--	PF	V_R=0V f =1MHz

Characteristic Curves

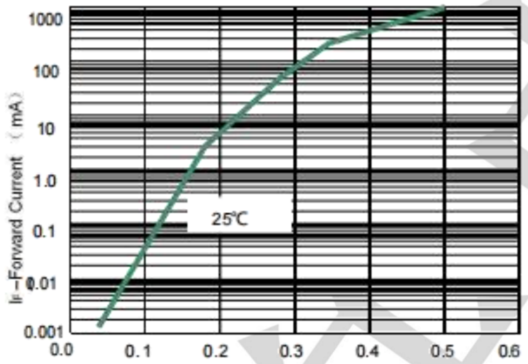


Fig 1.Forward Voltage

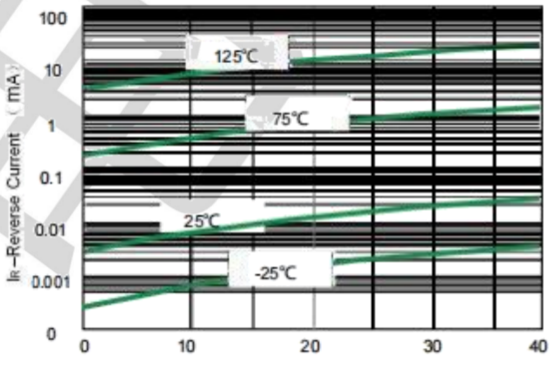
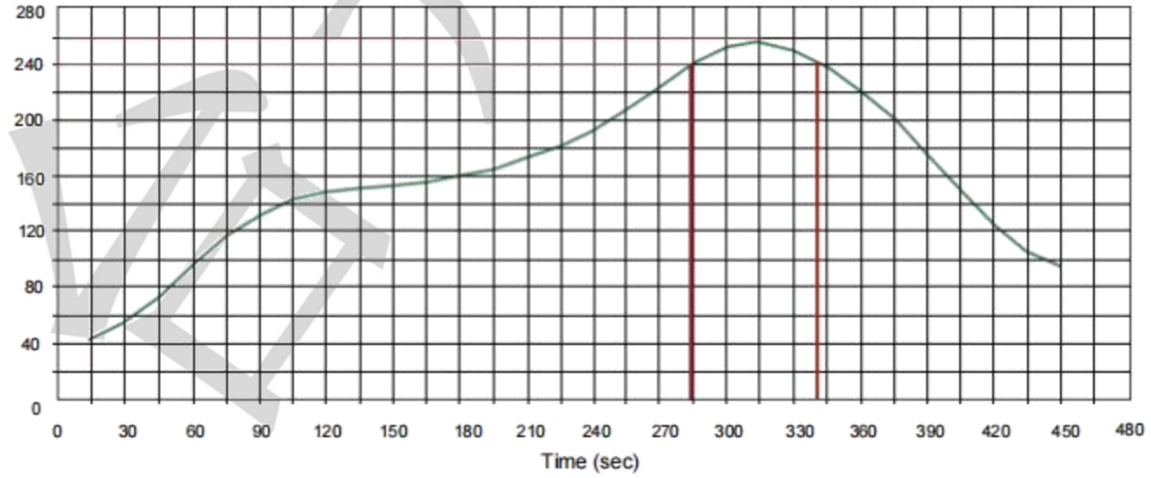


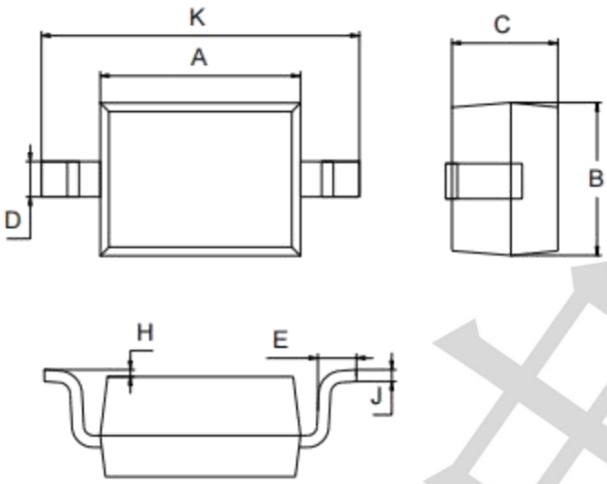
Fig 2.Leakage Current

Solder Reflow Recommendation

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



Package Outline & Dimensions
SOD323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout-SOD323 (unit: mm)