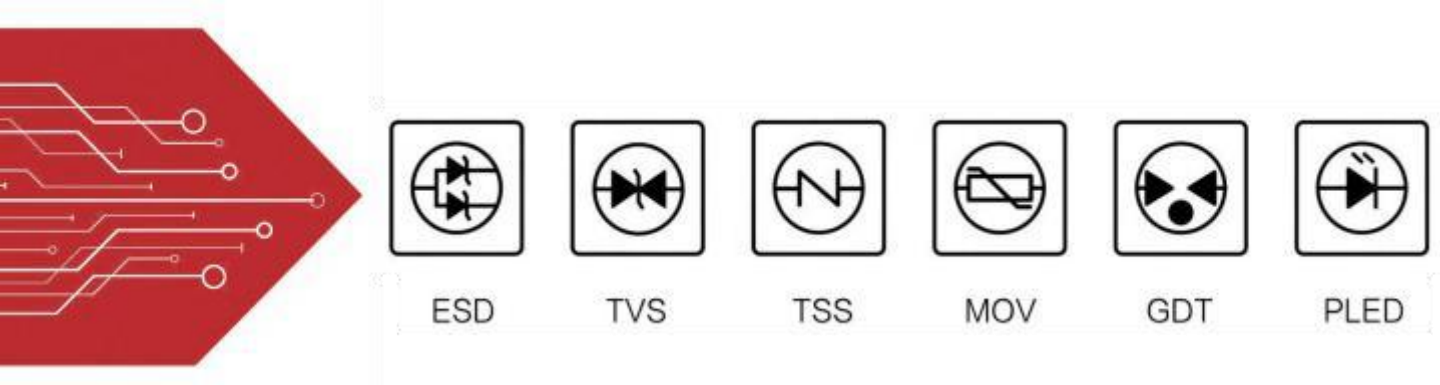
MSKSEMI
SEMICONDUCTOR



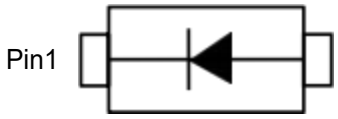
Product data sheet

Feature

Ultra Small mold type. (SOD-323)
Low I_R
High reliability.

Applications

Low current rectification



Circuit Diagram

Construction

Silicon epitaxial planar

Mechanical Characteristics

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

Marking(Top View)

Electrical characteristics per line@25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
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	C_j	-	120	-	pF	V_R=0V f =1MHz

Absolute maximum rating@25℃

Parameter	Symbol	limits	Unit
Reverse voltage(repetitive peak)	V_{RM}	45	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_o	1	A

Parameter	Symbol	limits	Unit
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	T_j	-55 to 125	℃
Storage temperature	T_{stg}	-55 to 125	℃

Typical Characteristics

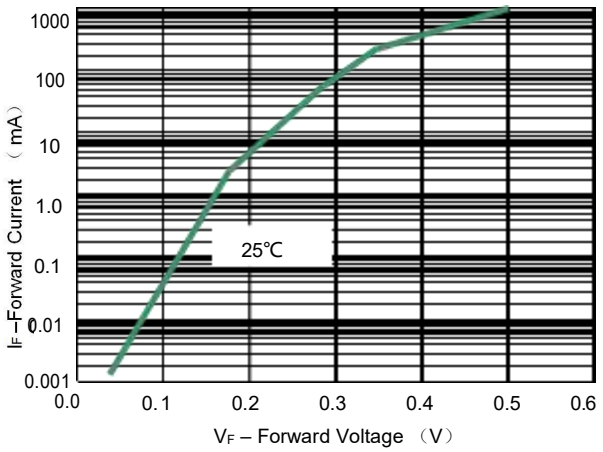


Fig 1.Forward Voltage

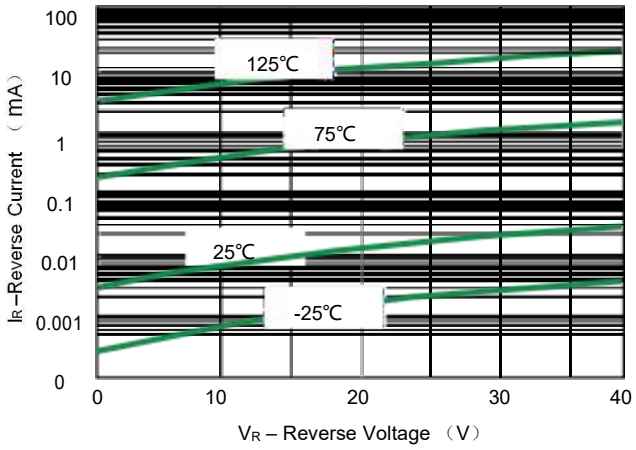
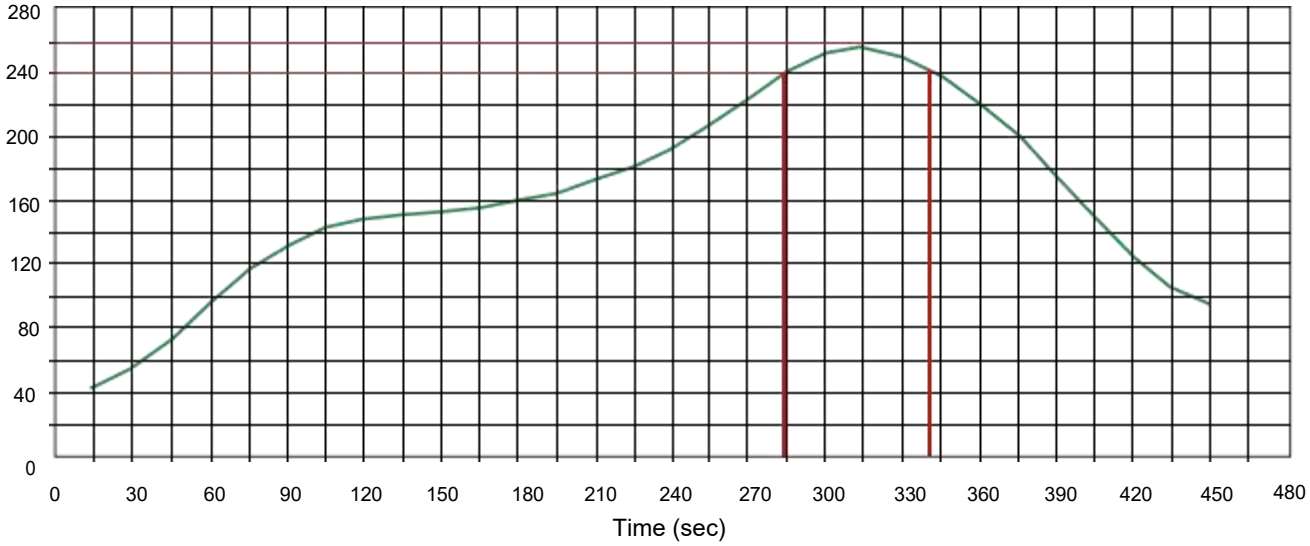


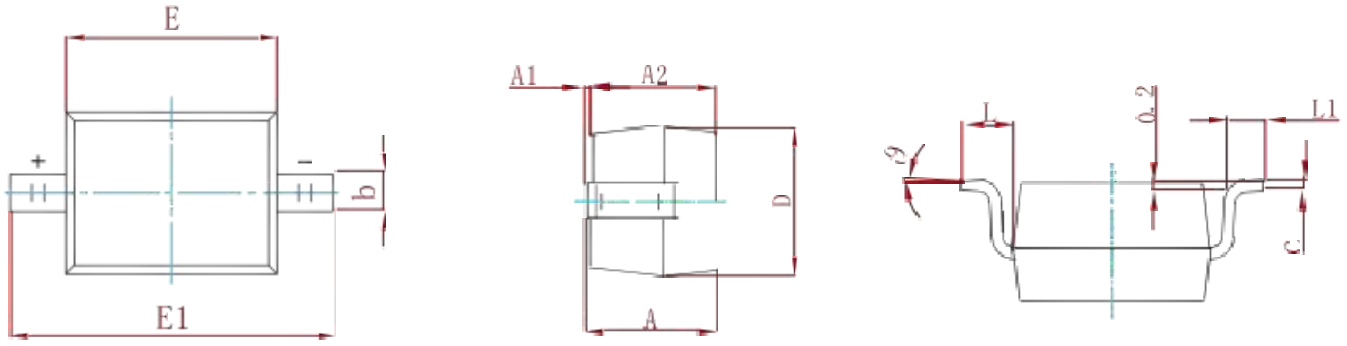
Fig 2.Leakage Current

Solder Reflow Recommendation

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

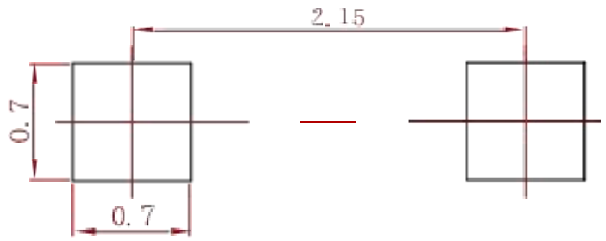


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:

1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
S7116-300A	SOD-323	3000

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