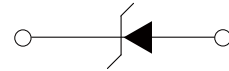


FEATURES

- | For surface mounted applications
- | Built-in strain relief, ideal for automated placement
- | Low reverse leakage
- | High forward surge current capability
- | terminals



SOD-123FL



Schematic Symbol

APPLICATIONS

- | Case : Molded plastic body
- | Polarity : Polarity symbol marking on body
- | Mounting Position : Any

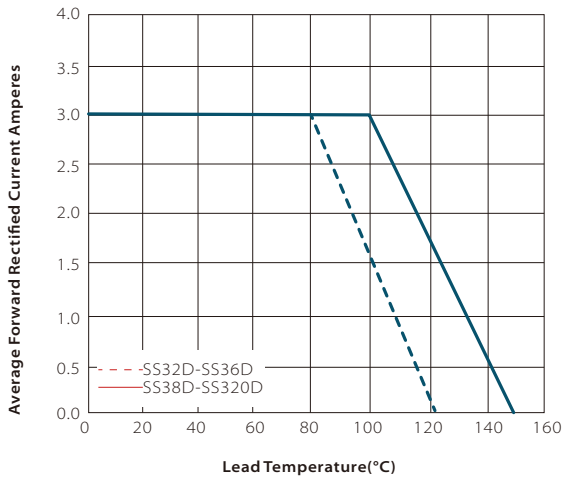
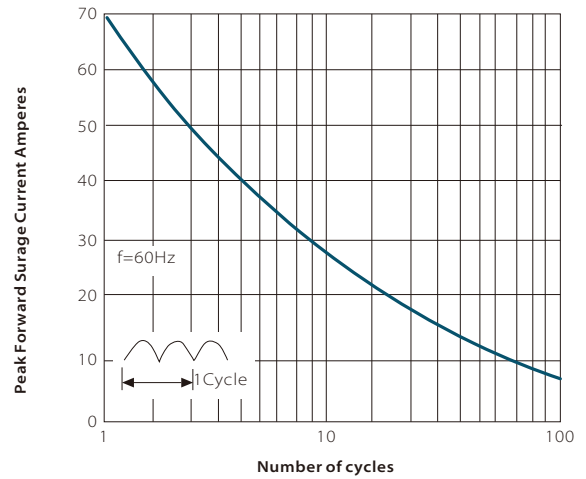
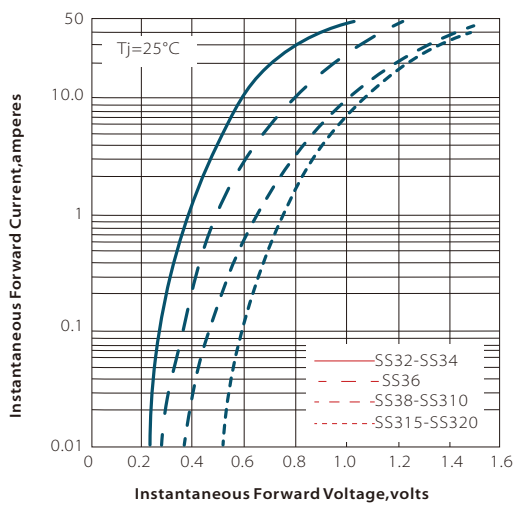
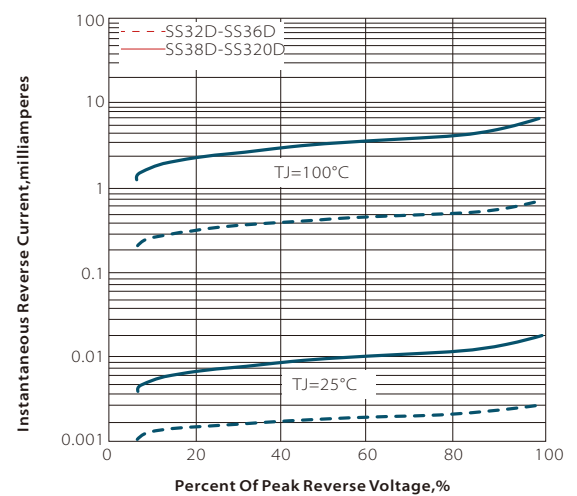
APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS (T_A = 25°C)

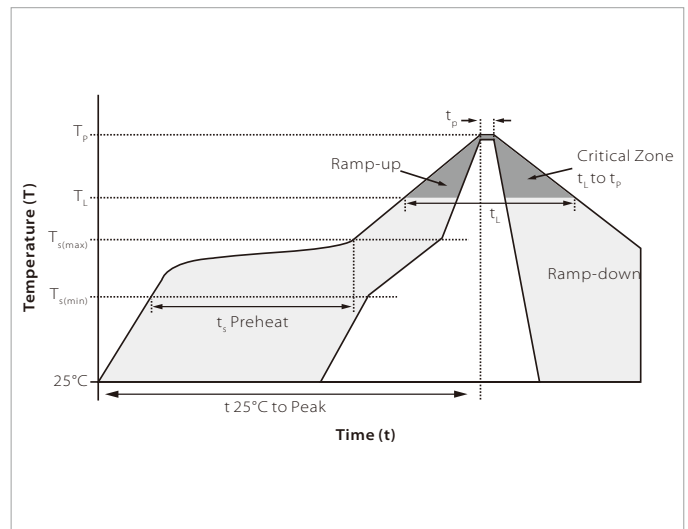
Parameter	Symbol	SS32D	SS34D	SS36D	SS38D	SS310D	SS315D	SS320D	Unit
Marking		D32	D34	D36	D38	D310	D315	D320	
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	60	80	100	150	200	V
Maximum RMS voltage	V _{RMS}	14	28	42	56	70	105	140	V
Maximum DC blocking voltage	V _{DC}	20	40	60	80	100	150	200	V
Maximum average forward rectified current at T _L =100 C	I _{F(AV)}	3.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	70							A
Maximum instantaneous forward voltage at 3.0A	V _F	0.55	0.70	0.85	0.95				V
Maximum DC reverse current at rated DC blocking voltage	T _A = 25°C	0.2			0.05				mA
	T _A = 100°C	20			5				mA
Typical thermal resistance	R _{θJA}	85							°C/W
Operating junction temperature range	T _J	-55 to +125			-55 to +150				°C
Storage temperature range	T _{STG}	-55 to +150							°C

CHARACTERISTIC CURVES

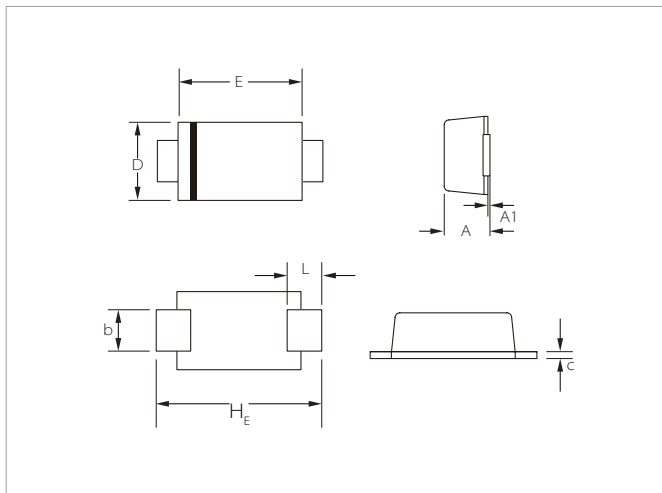
Fig. 1- Derating Curve Output Rectified Current

Fig. 2-maximum Non-repetitive Peak Forward Surge Current Perleg

Fig. 3-typical Forward Voltage Characteristics

Fig. 4-typical Reverse Leakage Characteristics


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_2)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_1)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

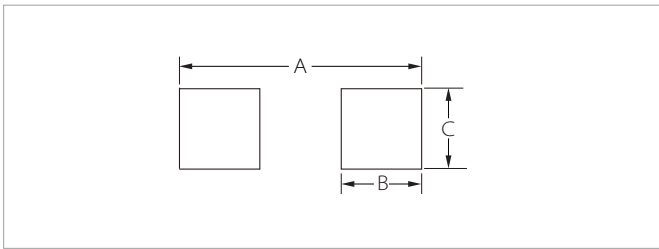


SOD-123FL PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.95	1.45	0.037	0.057
A1	0.00	0.10	0.000	0.004
b	0.70	1.20	0.028	0.047
c	0.05	0.30	0.002	0.012
D	1.50	2.00	0.059	0.079
E	2.50	2.90	0.098	0.114
L	0.35	0.90	0.014	0.035
H_E	3.40	3.90	0.134	0.154

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
A	4.20	0.165
B	1.50	0.059
C	1.20	0.047

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SS32D-SS320D	SOD-123FL	3000PCS	7"

To find your local partner within Semiwell's website: www.semiwell.com.cn

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