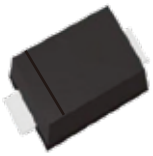
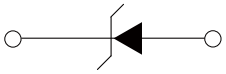
FEATURES

- 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

MECHANICAL DATA

- 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	I_R	0.2			0.05				mA
	T_A=100°C		20			5				mA
Typical Thermal Resistance		$R_{\theta JA}$	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

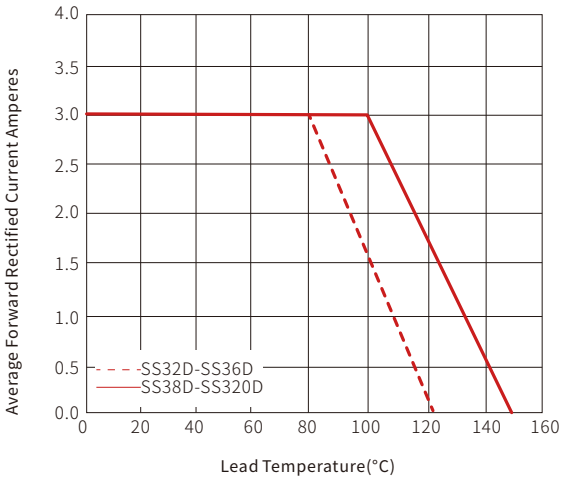


Fig. 2-Maximum Non-repetitive Peak Forward Surge Current Perleg

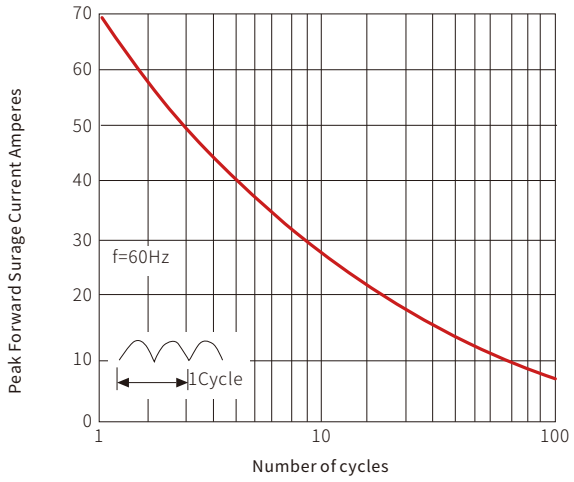


Fig. 3-Typical Forward Voltage Characteristics

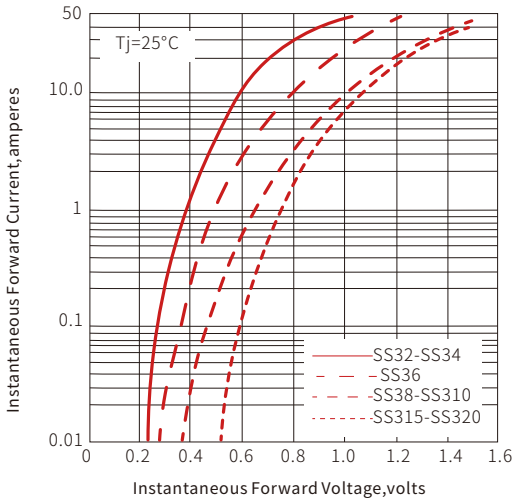
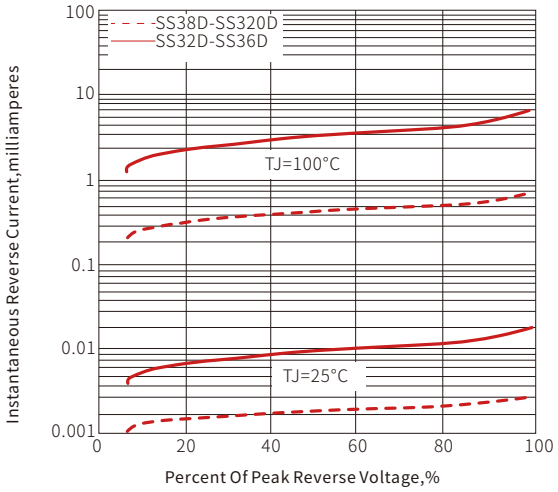
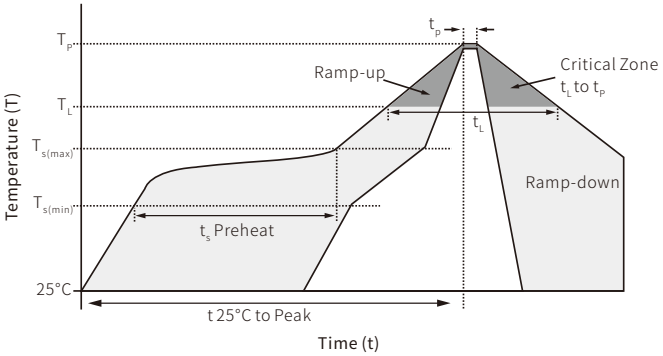


Fig. 4-Typical Reverse Leakage Characteristics

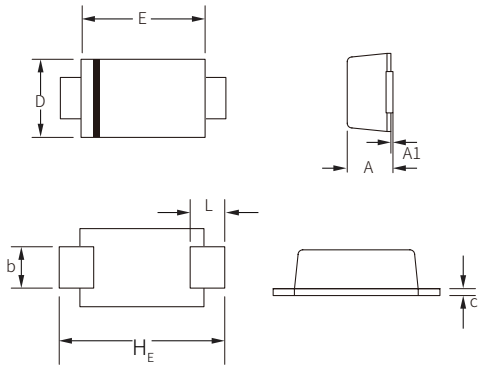


SOLDERING PARAMETERS

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_s)	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_L)	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

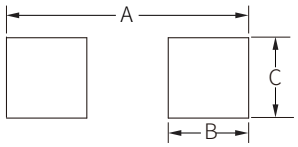


SOD-123FL PACKAGE INFORMATION



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”

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