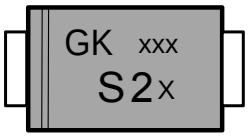
VOLTAGE RANGE
50 to 1000 Volts
CURRENT
2.0 Ampere

FEATURES

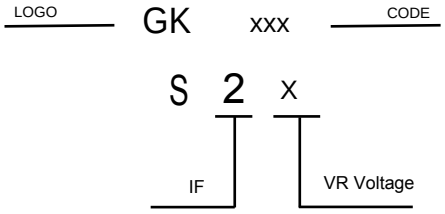
* Ideal for surface mount applications
* Easy pick and place
* Built-in strain relief
* High surge current capability





MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Terminals: Solder plated, solderable per MIL-STD-202F method 208 guranteed
* Polarity: Color band denotes cathode end
* Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25℃ ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	S2A	S2B	S2D	S2G	S2J	S2K	S2M	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	2.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	50							A
Maximum Instantaneous Forward Voltage at 2.0A	1.1							V
Maximum DC Reverse Current Ta=25℃	5.0							μA
at Rated DC Blocking Voltage Ta=100℃	100							μA
Typical Junction Capacitance (Note 1)	25							pF
Typical Thermal Resistance R JA (Note 2)	60							℃/W
Operating and Storage Temperature Range T_J, T_{STG}	-55 — +150							℃

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance from Junction to Ambient.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

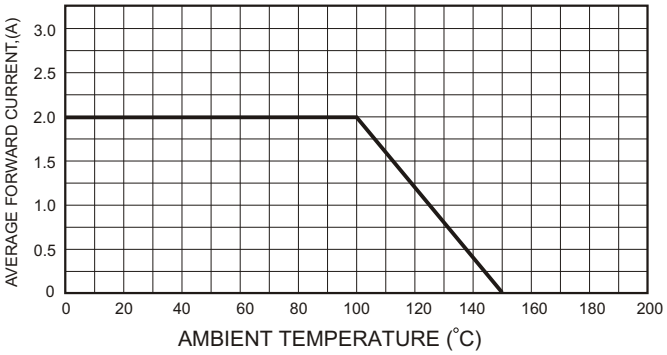


FIG.2-TYPICAL FORWARD CHARACTERISTICS

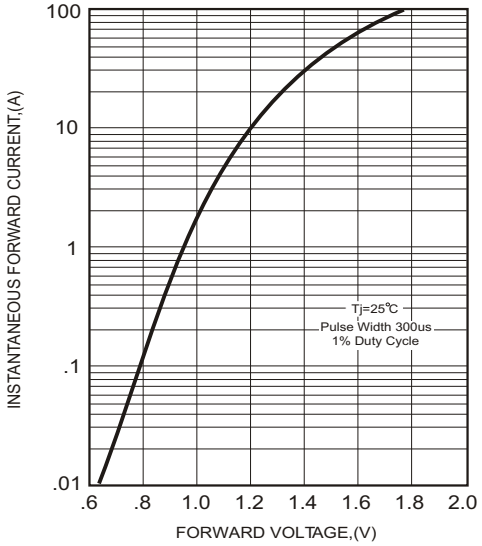


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

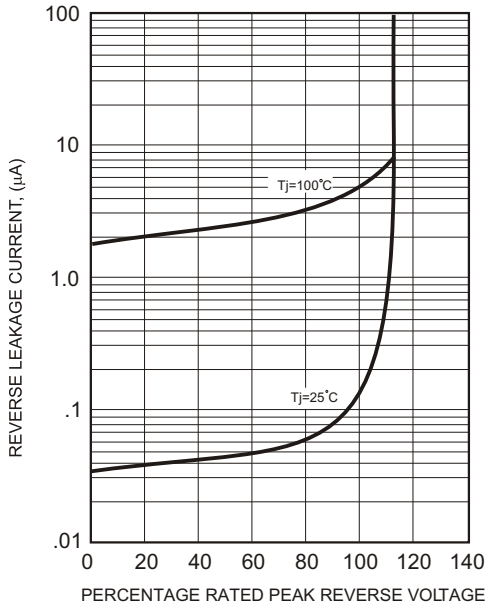


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

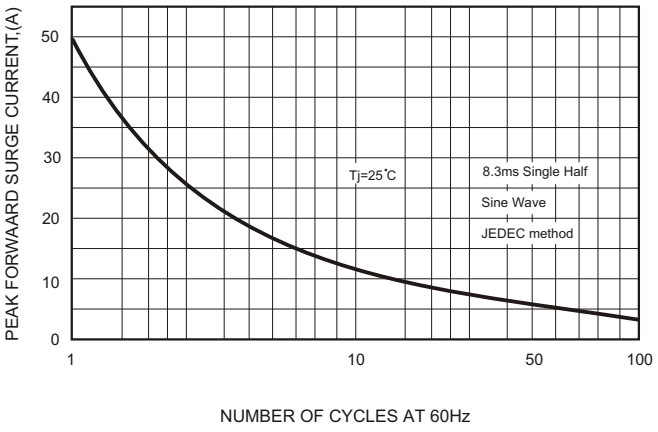
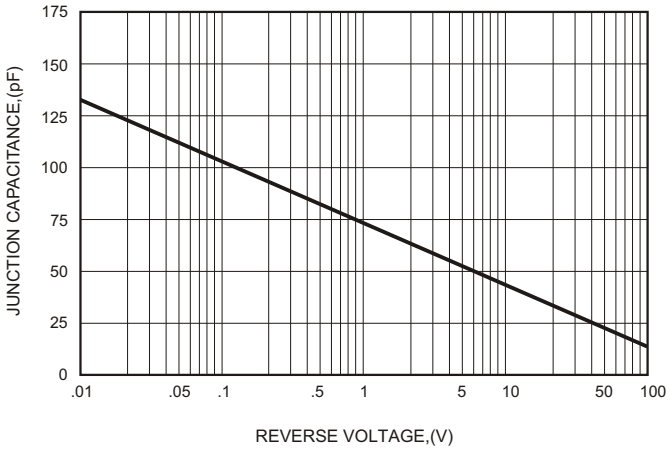


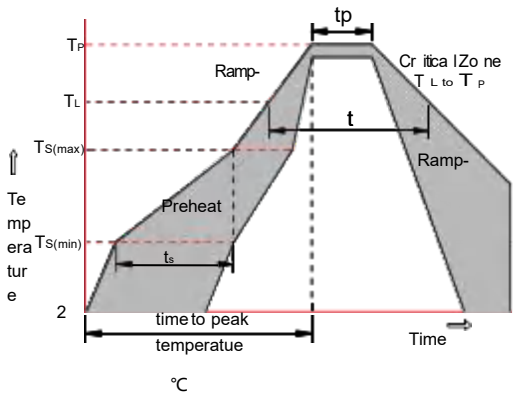
FIG.5-TYPICAL JUNCTION CAPACITANCE



Soldering parameters

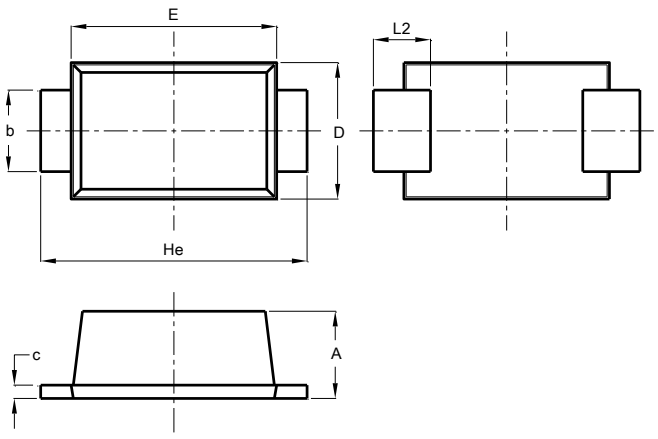
Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150℃
	-Temperature Max($T_{s(max)}$)	+200℃
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3℃/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3℃/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217℃
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5)℃
Time within 5℃ of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6℃/sec. Max
Time 25℃ to Peak Temp (T_P)		8 min. Max
Do not exceed		+260℃

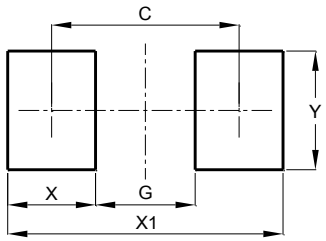
FIG5: Reflow condition



Package Dimensions & Suggested Pad Layout

SOD123FL



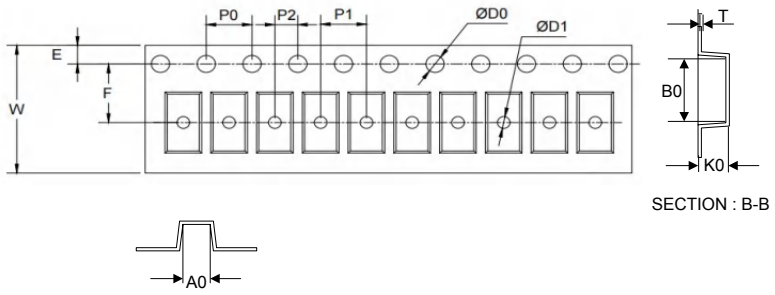


SOD123FL		
Dim	**Min**	**Max**
A	1.00	1.20
b	0.80	1.10
c	0.12	0.20
D	1.75	1.95
E	2.60	2.90
He	3.55	3.80
L2	0.50	0.85
All Dimensions in mm		

Dimensions	Value (in mm)
C	3.25
G	2.00
X	1.25
X1	4.50
Y	1.50

Tape & rell specification

Tape

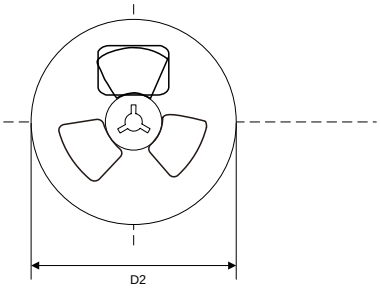


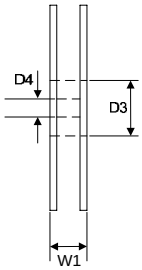
SECTION : B-B

SECTION : A-A

Symbol	Dimension (mm)
P0	4.00±0.20
P1	4.00±0.20
P2	2.00±0.20
D0	1.55±0.15
D1	1.00±0.20
E	1.75±0.20
F	3.50±0.25
W	8.00±0.20
A0	1.85±0.20
B0	3.95±0.20
K0	1.30±0.20
T	0.21±0.10

7” Reel





D2	178.0±5.0
D3	55.0Min.
D4	10.0±2.5
W1	11.5±2.5
Quantity: 3000PCS	