

## VOLTAGE RANGE

40-100 Volts

## CURRENT

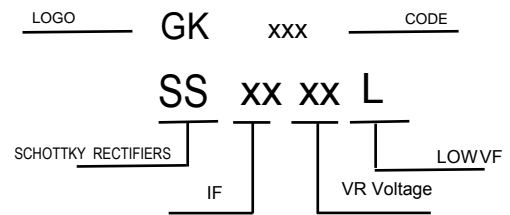
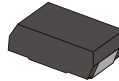
10.0 Ampere

## FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.063 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

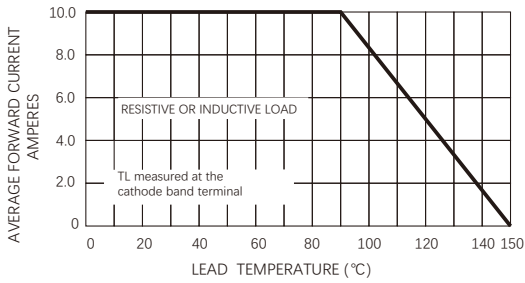
Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	SS1045L	SS1060L	SS10100 L	UNITS
Maximum Recurrent Peak Reverse Voltage	45	60	100	V
Maximum RMS Voltage	32	42	70	V
Maximum DC Blocking Voltage	45	60	100	V
Maximum Average Forward Rectified Current See Fig. 1	10.0			A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150			A
Maximum Instantaneous Forward Voltage at 10.0A	0.45	0.55	0.67	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	100			μA
	20			mA
Typical Junction Capacitance 4V,1MHz	450			pF
Typical Thermal Resistance R <sub>JA</sub> (Note 2)	55			°C/W
Operating Temperature Range T <sub>J</sub>	-55 to +150			°C
Storage Temperature Range T <sub>STG</sub>	-55 to +150			°C

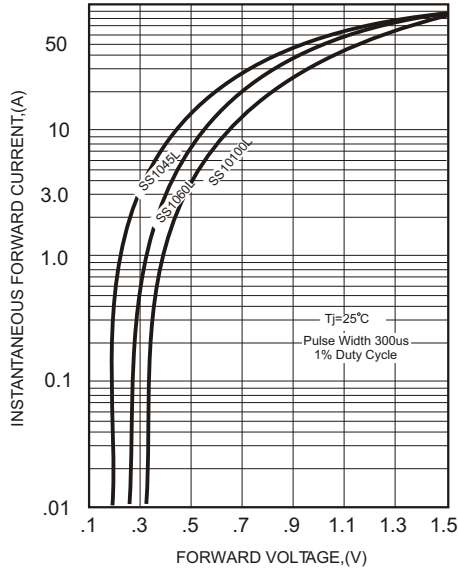
Note : 1.FR-4 PCB, 2oz.Copper.  
2.Polyimide PCB, 2oz.Copper.Cathode pad dimensions 18.8mm x 14.4mm.Anode pad dimensions 5.6mm x 14.4mm.

**RATING AND CHARACTERISTIC CURVES**

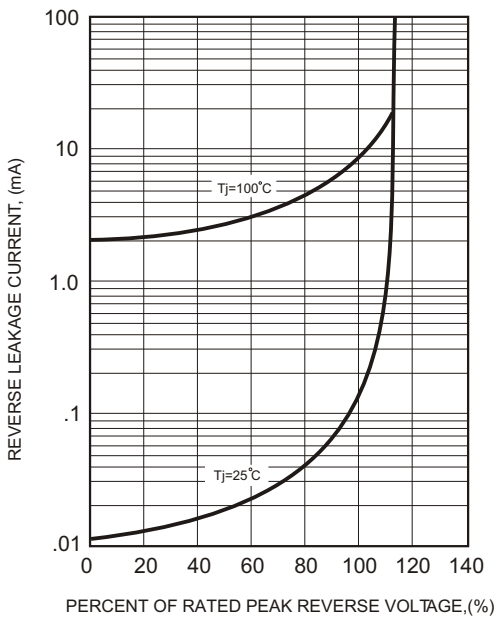
**FIG.1- Forward Current Derating Curve**



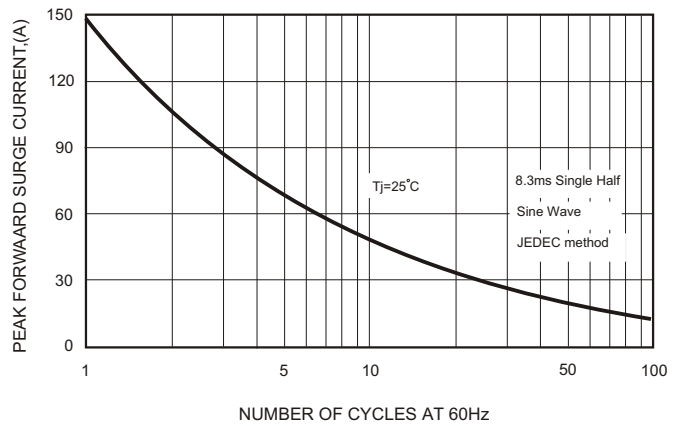
**FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE**



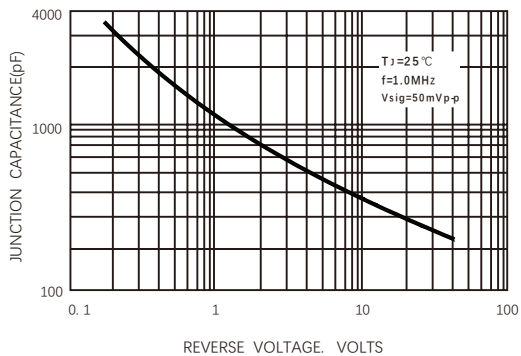
**FIG.3 - TYPICAL REVERSE CHARACTERISTICS**



**FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**

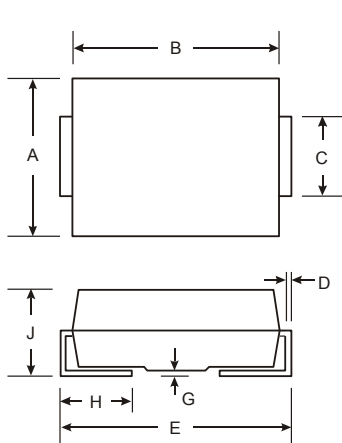


Soldering parameters

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

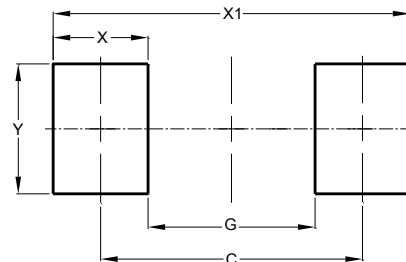


Package Dimensions & Suggested Pad Layout



SMC		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.15
D	0.15	0.31
E	7.75	8.13
G		0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

SMC



Dimensions	Value (in mm)
C	7.60
G	4.10
X	3.50
X1	11.10
Y	4.50

Tape & reel specification

Tape		Symbol	Dimension (mm)
<p>SECTION : A-A</p> <p>SECTION : B-B</p>		P0	4.00±0.20
		P1	8.00±0.20
		P2	2.00±0.20
		D0	1.60±0.20
		D1	1.60±0.20
		E	1.75±0.20
		F	7.50±0.20
		W	16.00±0.20
		A0	6.30±0.20
		B0	8.20±0.20
		K0	2.60±0.20
		T	0.23±0.10
		13" Reel	
		D3	73Min.
		D4	16.0±2.5
		W1	20.0±2.0
		Quantity: 3000PCS	