VOLTAGE RANGE
40 Volts
CURRENT
3.0 Ampere

## FEATURES

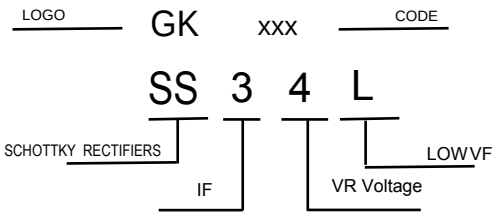
* Ideal for surface mount applications
* Easy pick and place
* Built-in strain relief
* Low forward voltage drop

## 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 uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

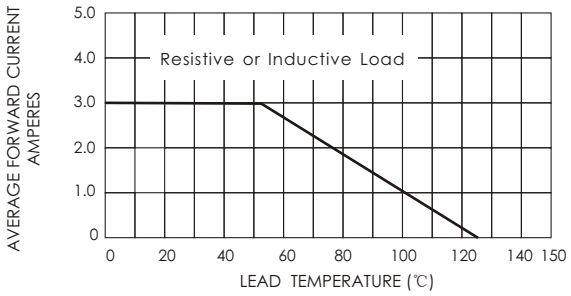
| TYPE NUMBER | SS34L | UNITS |
|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | 40 | V |
| Maximum RMS Voltage | 28 | V |
| Maximum DC Blocking Voltage | 40 | V |
| Maximum Average Forward Rectified Current<br>See Fig. 1 | 3.0 | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | 80 | A |
| Maximum Instantaneous Forward Voltage at 3.0A | 0.46 | V |
| Maximum DC Reverse Current Ta=25°C | 0.2 | mA |
| at Rated DC Blocking Voltage Ta=125°C | 30 | mA |
| Typical Junction Capacitance (Note1) | 240 | pF |
| Typical Thermal Resistance R JA (Note 2) | 88 | °C/W |
| Operating Temperature Range $T_J$ | -55 to +125 | °C |
| Storage Temperature Range $T_{STG}$ | -55 to +150 | °C |

**NOTES:**

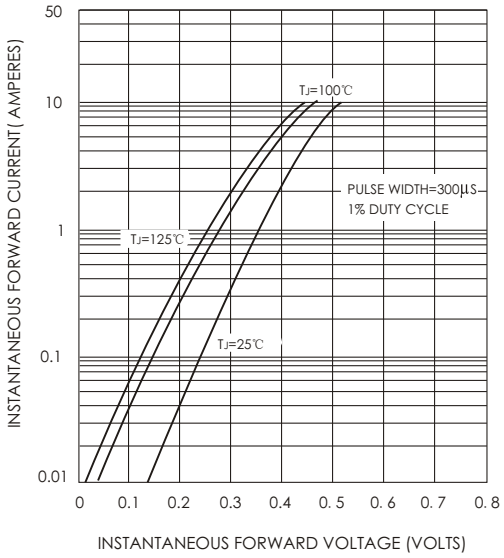
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

## RATING AND CHARACTERISTIC CURVES

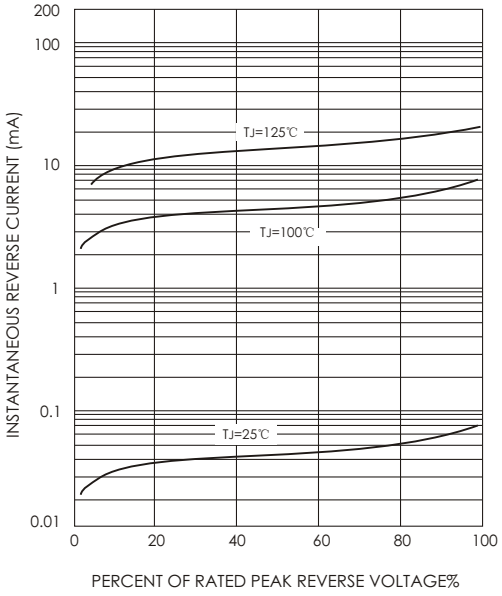
### FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE



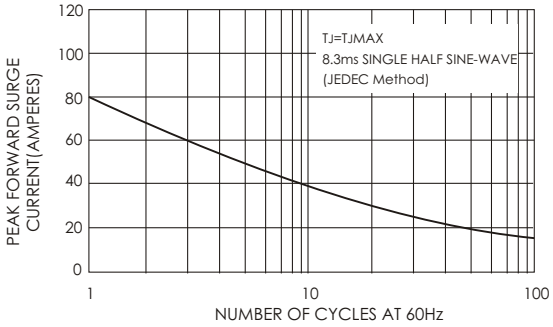

### FIG.2-TYPICAL FORWARD CHARACTERISTICS



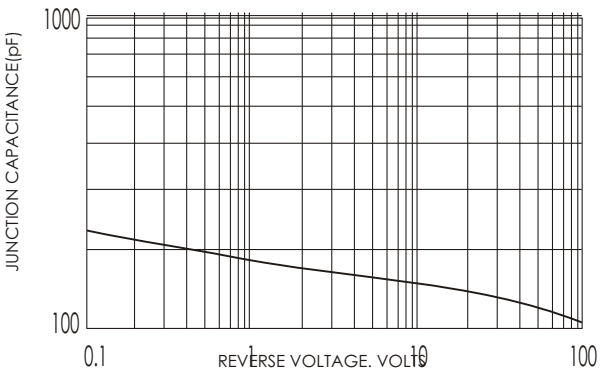

### FIG.3 - TYPICAL REVERSE CHARACTERISTICS




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



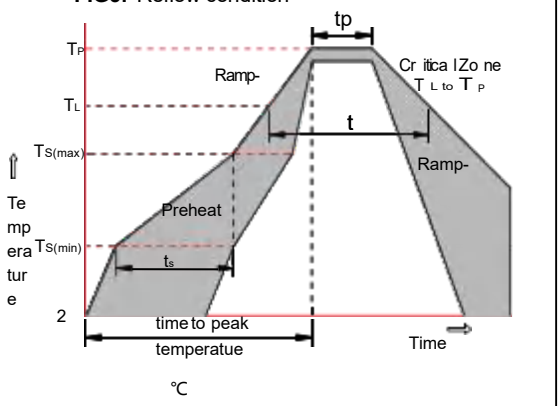

### FIG.5-TYPICAL JUNCTION CAPACITANCE



## Soldering parameters

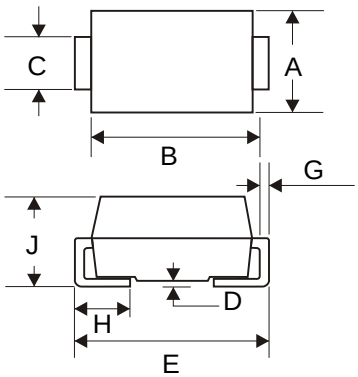
| Reflow Condition | | Pb-Free assembly (see as bellow) |
|---|---|---|
| Pre Heat | -Temperature Min ($T_{s(min)}$) | +150℃ |
| | -Temperature Max($T_{s(max)}$) | +200℃ |
| | -Time (Min to Max) (ts) | 60-180 secs. |
| Average ramp up rate (Liquid us Temp ($T_L$) to peak) | | 3℃/sec. Max |
| $T_{s(max)}$ 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

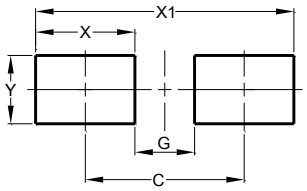



## Package Dimensions & Suggested Pad Layout

**SMA**



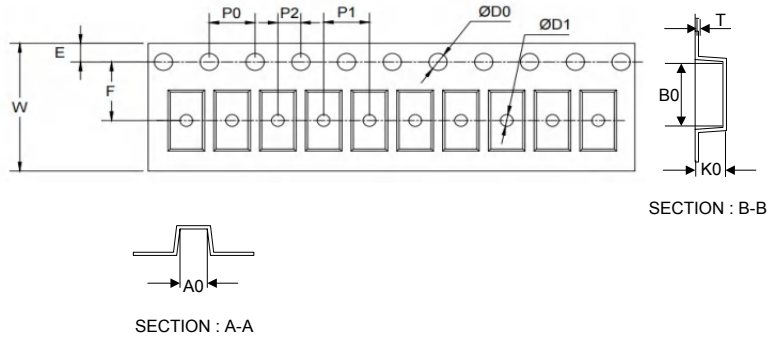

| SMA | | |
|---|---|---|
| **Dim** | **Min** | **Max** |
| **A** | 2.40 | 2.79 |
| **B** | 3.99 | 4.50 |
| **C** | 1.32 | 1.47 |
| **D** | - | 0.20 |
| **E** | 4.93 | 5.28 |
| **G** | 0.15 | 0.31 |
| **H** | 0.76 | 1.52 |
| **J** | 1.98 | 2.29 |
| **All Dimensions in mm** | | |




| Dimensions | Value (in mm) |
|---|---|
| **C** | 4.20 |
| **G** | 1.90 |
| **X** | 2.30 |
| **X1** | 6.50 |
| **Y** | 2.00 |

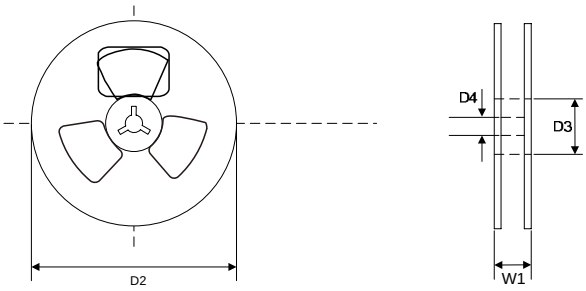
## Tape & rell specification

Tape



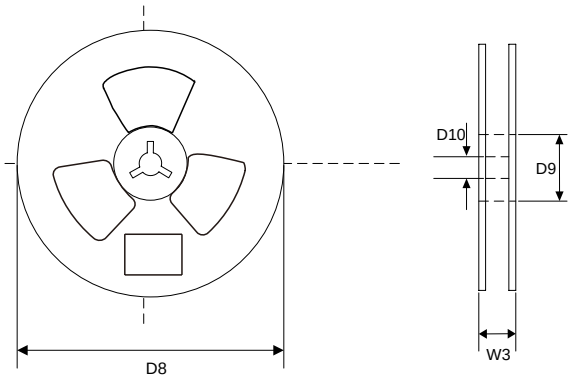

| Symbol | Dimension (mm) |
|---|---|
| P0 | 4.00±0.20 |
| P1 | 4.00±0.20 |
| P2 | 2.00±0.20 |
| D0 | 1.60±0.20 |
| D1 | 1.60±0.20 |
| E | 1.75±0.20 |
| F | 5.50±0.15 |
| W | 12.00±0.25 |
| A0 | 2.75±0.20 |
| B0 | 5.25±0.20 |
| K0 | 2.45±0.25 |
| T | 0.20±0.10 |

7” Reel




| | |
|---|---|
| D2 | 176.0±5.0 |
| D3 | 55.0Min. |
| D4 | 14.0±2.5 |
| W1 | 14.0±2.5 |
| Quantity: 2000PCS | |

13” Reel




| | |
|---|---|
| D8 | 330.0±5.0 |
| D9 | 73.0Min. |
| D10 | 14.0±2.5 |
| W3 | 14.0±2.5 |
| Quantity: 5000PCS | |