

**VOLTAGE RANGE**

40 Volts

**CURRENT**

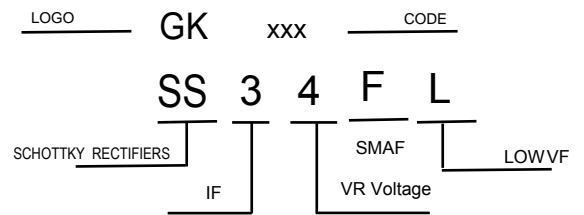
3.0 Ampere

**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



**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	SS34FL	UNITS
Maximum Recurrent Peak Reverse Voltage	40	V
Maximum RMS Voltage	28	V
Maximum DC Blocking Voltage	40	V
Maximum Average Forward Rectified Current See Fig. 1	3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave 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 Tj	-55 to +125	°C
Storage Temperature Range Tstg	-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

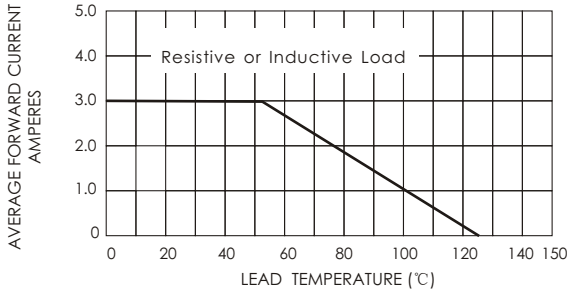


FIG.2-TYPICAL FORWARD CHARACTERISTICS

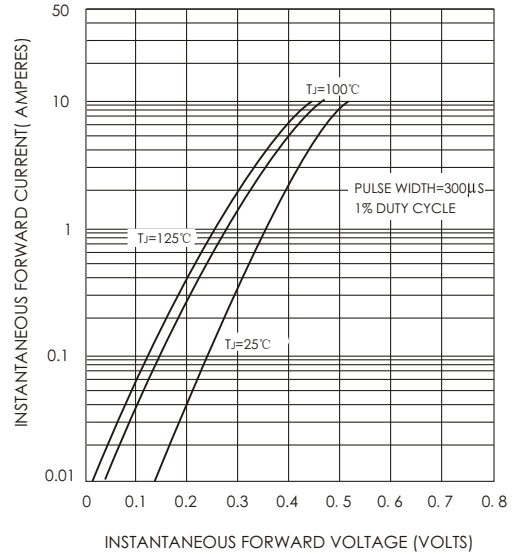


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

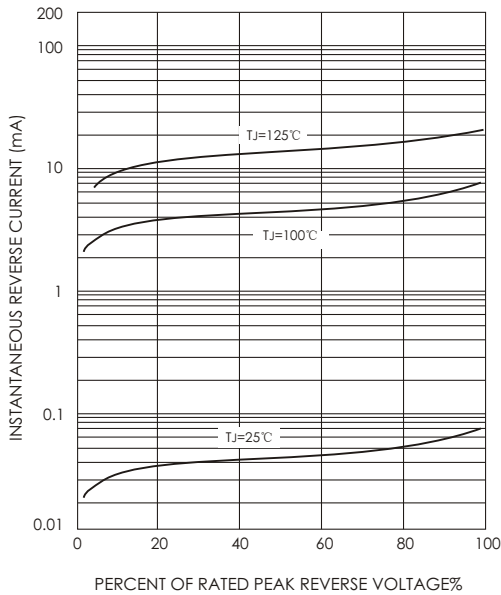


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

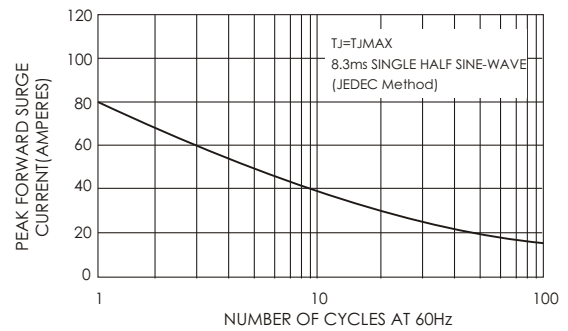
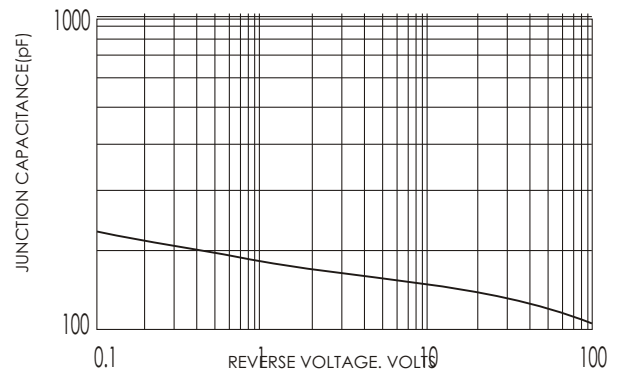
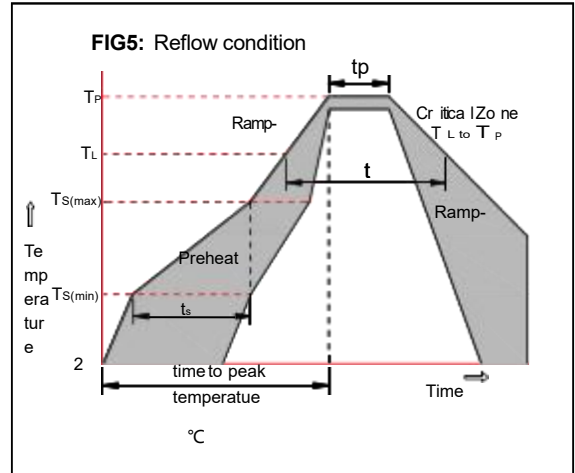


FIG.5-TYPICAL JUNCTION CAPACITANCE



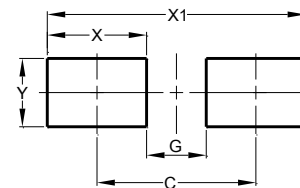
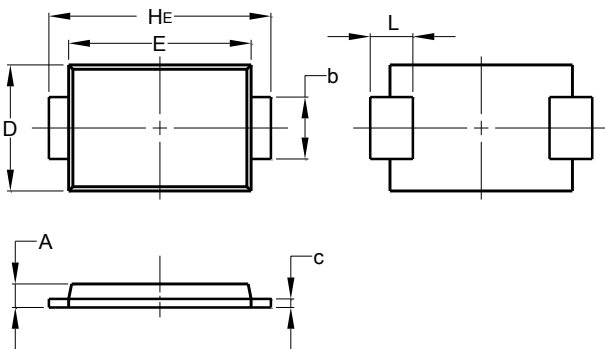
**Soldering parameters**

Reflow Condition		Pb-Free assembly (see as 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**

**SMAF**



SMAF		
Dim	Min	Max
A	0.90	1.20
b	1.30	1.60
c	0.10	0.20
D	2.40	2.70
E	3.30	3.70
HE	4.40	4.90
L	0.60	1.20
All Dimensions in mm		

Dimensions	Value (in mm)
C	3.80
G	2.20
X	1.60
X1	5.40
Y	1.70

Tape & reel specification

Tape	Symbol	Dimension (mm)
	P0	4.00±0.20
	P1	4.00±0.20
	P2	2.00±0.20
	D0	1.55±0.25
	D1	1.55±0.25
	E	1.75±0.20
	F	5.50±0.20
	W	12.00±0.20
	A0	2.85±0.20
	B0	5.00±0.20
	K0	1.45±0.20
	T	0.26±0.10
	7" Reel	D2
	D3	55.0Min.
	D4	14.0±2.5
	W1	14.0±2.5
	Quantity: 3000PCS	
	13" Reel	D5
	D6	73.0Min.
	D7	14.0±2.5
	W2	14.0±2.5
	Quantity: 10000PCS	