

VOLTAGE RANGE

40 Volts

CURRENT

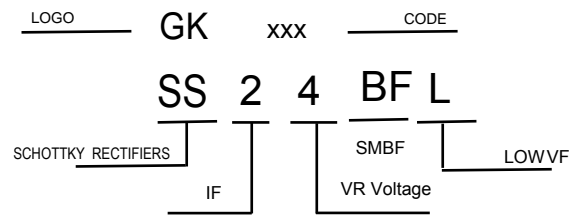
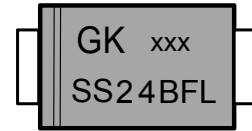
2.0 Ampere

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	SS24BFL	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	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	0.46	V
Maximum DC Reverse Current Ta=25°C	0.2	mA
at Rated DC Blocking Voltage Ta=125°C	50	mA
Typical Junction Capacitance (Note1)	170	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

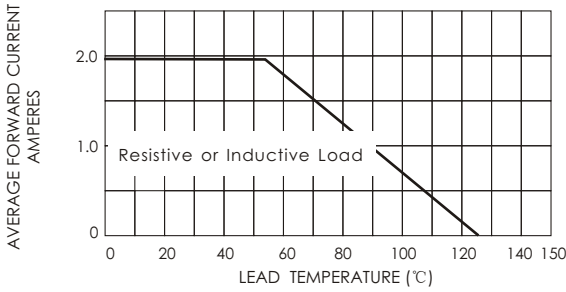


FIG.2-TYPICAL FORWARD CHARACTERISTICS

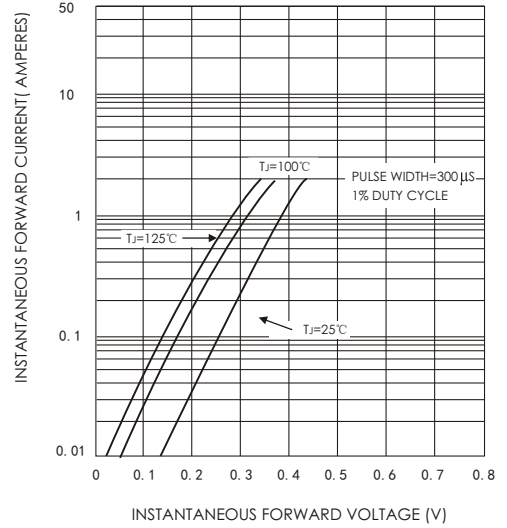


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

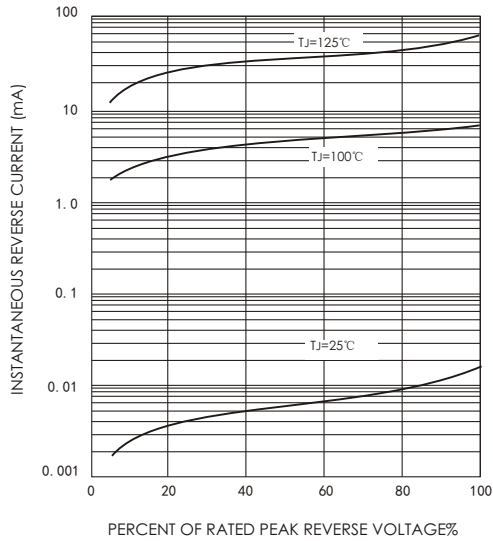


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

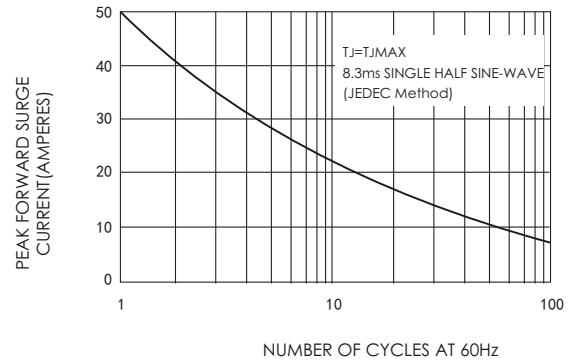
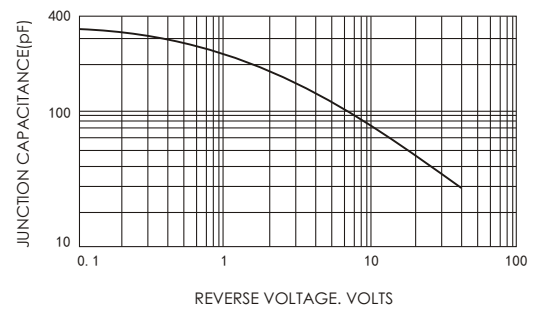


FIG.5-TYPICAL JUNCTION CAPACITANCE



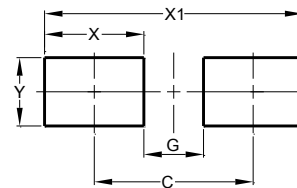
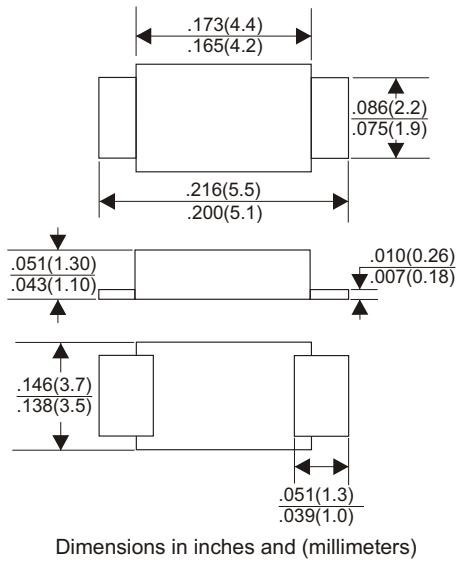
Soldering parameters

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

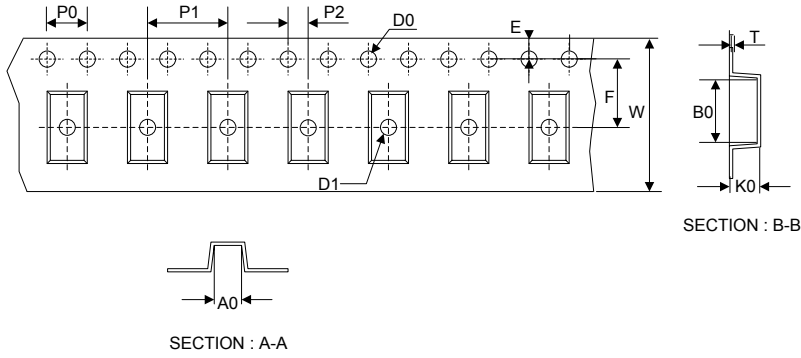
SMBF



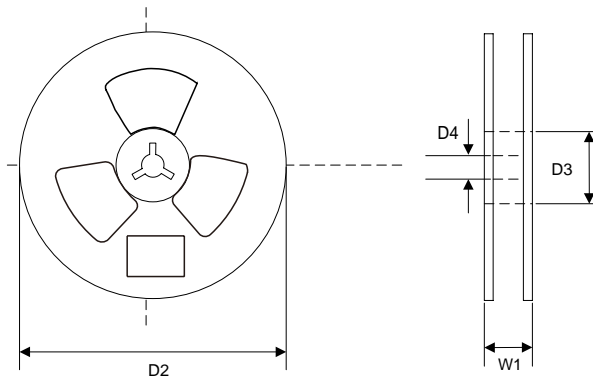
Dimensions	Value (in mm)
C	4.60
G	2.50
X	2.10
X1	6.70
Y	2.50

Tape & reel specification

Tape



13" Reel



Symbol	Dimension (mm)
P0	4.00±0.20
P1	8.00±0.20
P2	2.00±0.20
D0	1.55±0.15
D1	1.55±0.15
E	1.75±0.20
F	5.50±0.05
W	12.00±0.10
A0	2.93±0.25
B0	5.00±0.25
K0	1.45±0.20
T	0.25±0.10
D2	330.0±5.0
D3	73.0Min.
D4	14.0±2.5
W1	16.0±2.5
Quantity: 5000PCS	