

FEATURES

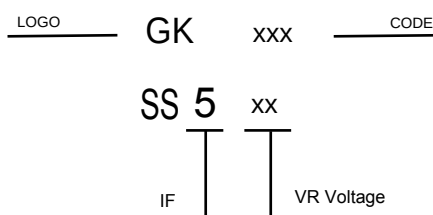
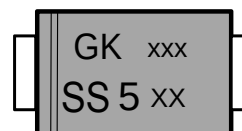
- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202F method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.093 gram



VOLTAGE RANGE
150 to 200 Volts
CURRENT
5.0 Ampere



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	SS515	SS520	UNITS
Maximum Recurrent Peak Reverse Voltage	150	200	V
Maximum RMS Voltage	105	140	V
Maximum DC Blocking Voltage	150	200	V
Maximum Average Forward Rectified Current	5.0		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120		A
Maximum Instantaneous Forward Voltage at 5.0A	0.92		V
Maximum DC Reverse Current Ta=25°C	0.02		mA
at Rated DC Blocking Voltage Ta=100°C	2		mA
Typical Junction Capacitance (Note1)	380		PF
Typical Thermal Resistance RθJA(Note 2)	55		°C/W
Operating Temperature Range Tj	-65 — +175		°C
Storage Temperature Range Tstg	-65 — +175		°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 0.4x0.4"(10x10mm) copper pad areas

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

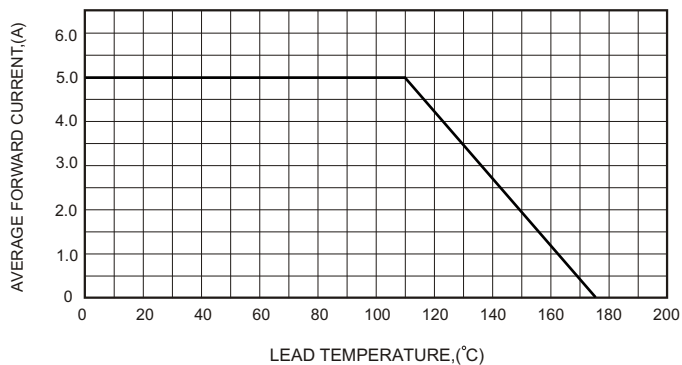


FIG.2-TYPICAL FORWARD CHARACTERISTICS

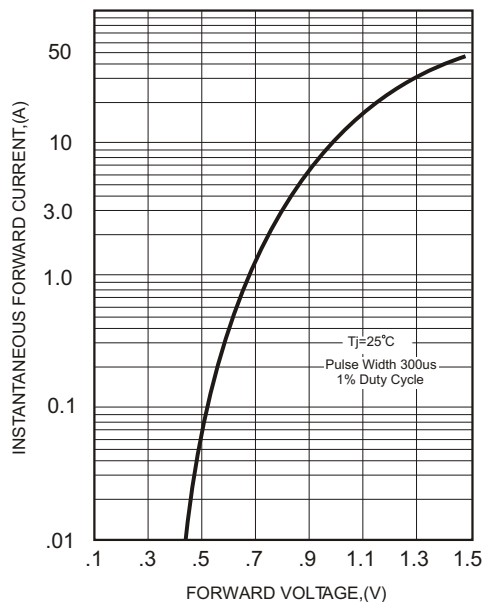


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

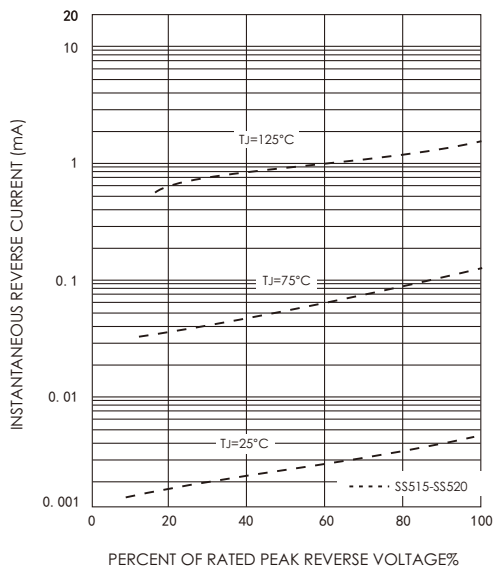


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

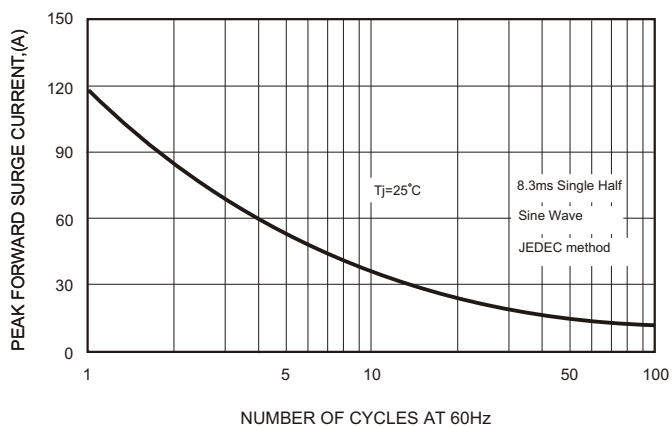
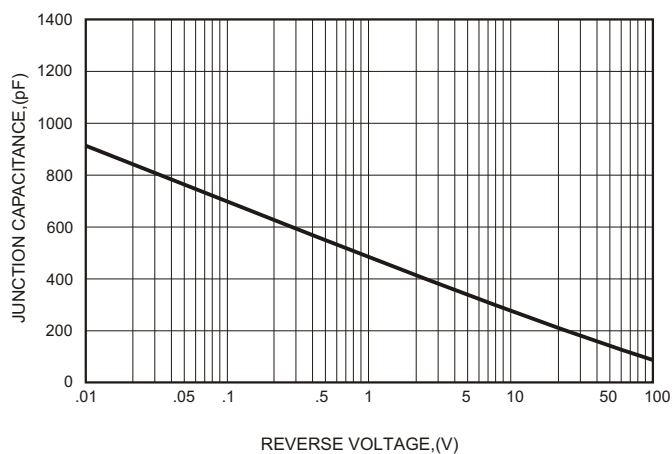


FIG.5-TYPICAL JUNCTION CAPACITANCE



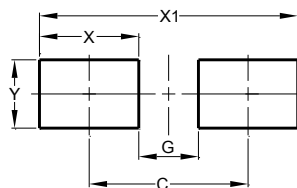
Soldering parameters

FIG5: Reflow condition

The graph illustrates the temperature profile for a reflow condition. The y-axis represents Temperature (°C) and the x-axis represents Time. The profile starts at a preheat temperature, ramps up through a preheat zone, then a ramp zone, and finally a critical zone where it levels off at a peak temperature. Key parameters labeled include: T_p (peak temperature), T_L (liquidus temperature), $T_{S(max)}$ (maximum solder temperature), $T_{S(min)}$ (minimum solder temperature), t_s (time to peak temperature), t (time in the critical zone), and t_p (time to peak temperature). The graph is divided into three shaded regions: Preheat, Ramp, and Critical Zone.

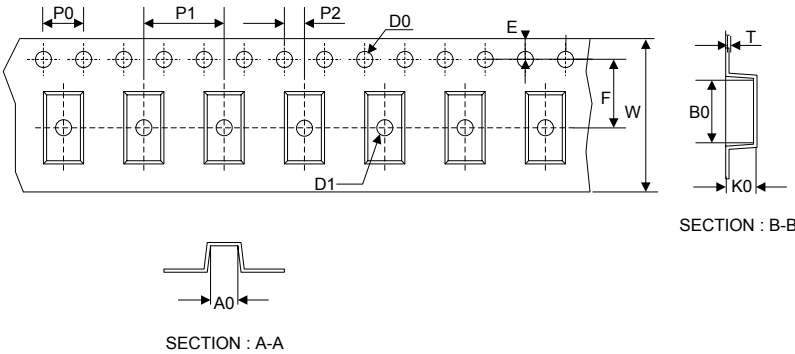
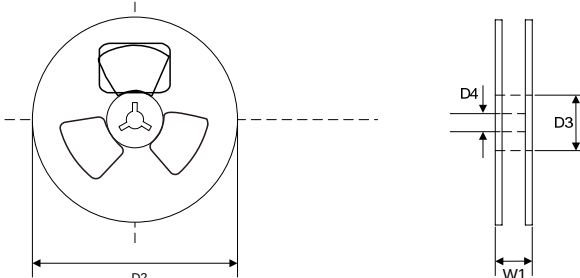
Package Dimensions & Suggested Pad Layout

SMB



Dimensions	Value (in mm)
C	4.70
G	2.20
X	2.50
X1	7.20
Y	2.80

Tape & reel specification

Tape		Symbol	Dimension (mm)
		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	5.50±0.15
		W	12.00±0.20
		A0	4.00±0.20
		B0	5.45±0.20
		K0	2.50±0.25
		T	0.20±0.10
		D2	330.0±5.0
13" Reel		D3	73.0Min.
		D4	14.0±2.5
		W1	16.0±2.5
		Quantity: 3000PCS	