



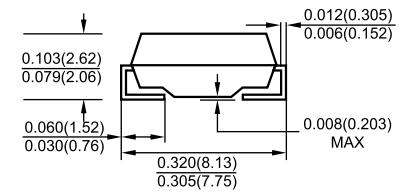
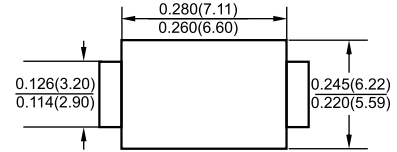
## Features

- ✧ Plastic package has underwriters laboratory flammability classification 94V-0
- ✧ For surface mounted applications
- ✧ Low profile package
- ✧ Built-in strain relief, ideal for automated placement
- ✧ High temperature soldering:
- ✧ 250°C/10 seconds at terminals

## Mechanical Data

- ✧ Case: JEDEC DO-214AB, molded plastic over passivated chip
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.007 ounces, 0.21 gram

### SMC/DO-214AB



Dimensions in inches and (millimeters)

## Marking Information



**LGE:** Lu Guang Electronic  
**XXXX:** marking code (S5A-S5Y)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

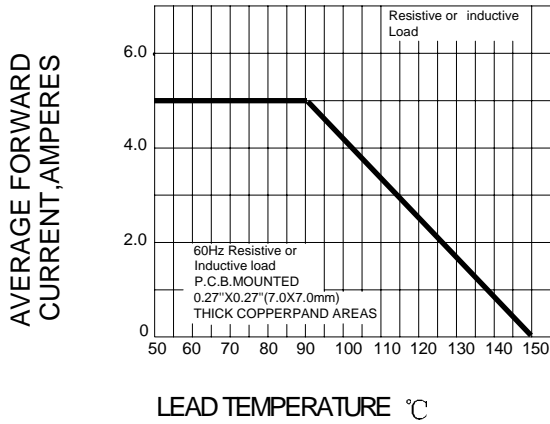
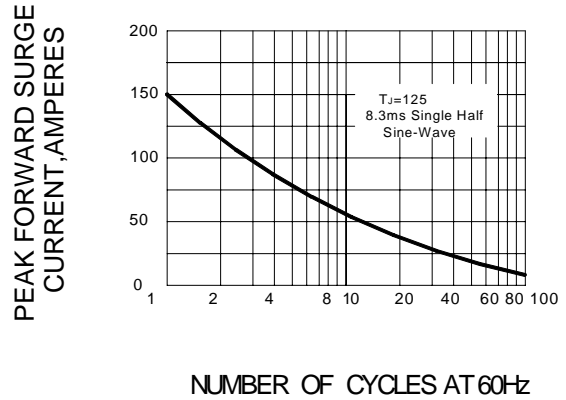
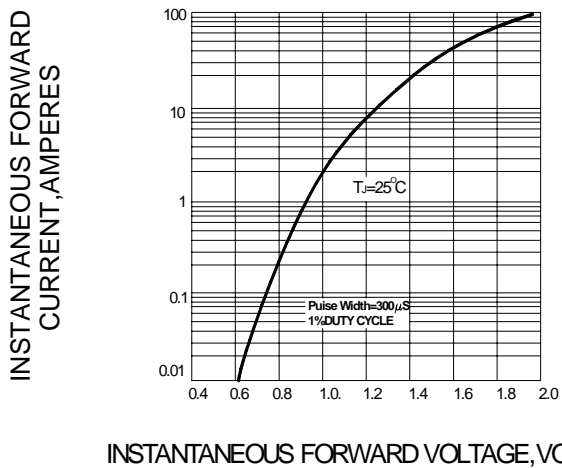
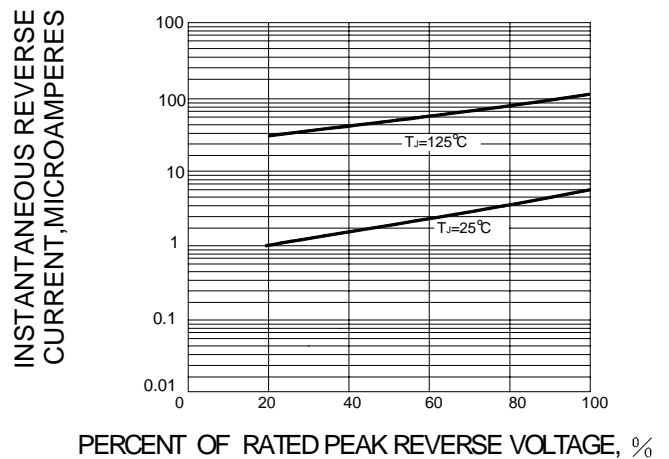
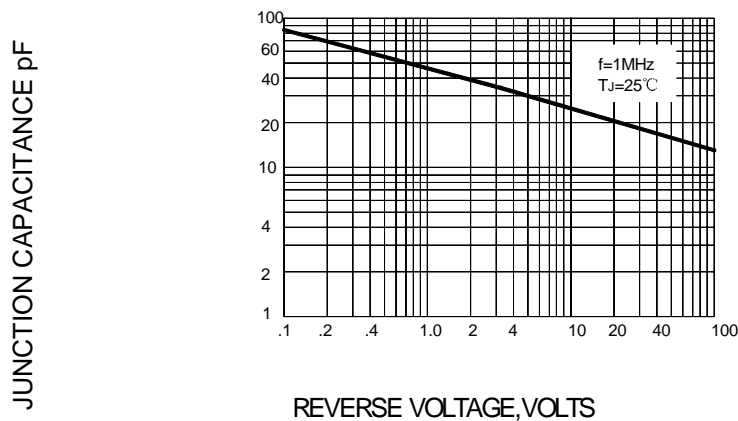
Ratings at 25°C ambient temperature unless otherwise specified

		S5A	S5B	S5D	S5G	S5J	S5K	S5M	S5T	S5W	S5X	S5Y	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1300	1600	1800	2000	V
Maximum RMS voltage	$V_{RWS}$	35	70	140	280	420	560	700	760	820	880	940	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	1300	1600	1800	2000	V
Maximum average forward rectified current @ $T_L=90^\circ\text{C}$	$I_{F(AV)}$	5.0											A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150											A
Maximum Instantaneous forward voltage at 5.0 A	$V_F$	1.15											V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	$I_R$	10											$\mu\text{A}$
Typical junction capacitance	$C_J$	35											pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	40											$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55-----+150											$^\circ\text{C}$

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts

2. Thermal resistance from junction to ambient and junction to lead P.C.B. mounted on 0.27"X0.27"(7.0X7.0mm<sup>2</sup>) copper pad areas

# Ratings AND Characteristic Curves

**FIG.1 – FORWARD DERATING CURVE**

**FIG.2 PEAK FORWARD SURGE CURRENT**

**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**

**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**

**FIG.5-TYPICAL JUNCTION CAPACITANCE**


PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMC	3000/REEL	42000	36X36X36.5	18.50	15.50