



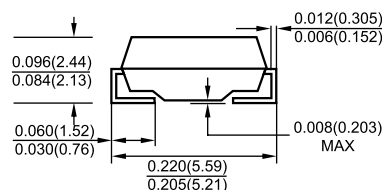
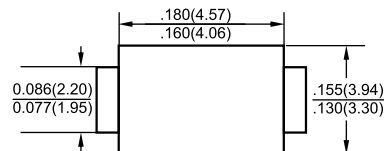
Features

- ◇ Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound.
- ◇ Guard ring for overvoltage protection
- ◇ High current capability, low forward voltage drop
- ◇ Low power loss, high efficiency
- ◇ High surge capability

Mechanical Data

- ◇ Case: Molded plastic SMB
- ◇ Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting Position: Any
- ◇ Weight: 0.093 gram
- ◇ Lead Free: For RoHS/Lead Free Version
- ◇ Marking: LGE SS5XX

SMB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate by 20%.

Type Number	Symbol	SS 52B	SS 54B	SS 55B	SS 56B	SS 58B	SS5 10B	SS5 15B	SS5 20B	UNITS
Marking code		SS 52	SS 54	SS 55	SS 56	SS 58	SS5 10	SS5 15	SS5 20	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	50	60	80	100	150	200	V
Average Rectified Output Current (Note 1) @ $T_L=100^\circ C$	$I_{F(AV)}$	5.0								A
Peak forward surge current: 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	175								A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	127								A ² S
Forward Voltage @ $I_F=5.0A$	V_{FM}	0.45	0.55	0.7		0.85		0.85		V
Peak Reverse Current @ $T_A=25^\circ C$	I_R	0.5				0.1				mA
At Rated DC Blocking Voltage @ $T_A=100^\circ C$	I_R	20				10				
Typical Junction Capacitance (Note 2)	C_J	500				350				pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	55								°C/W
Operating Temperature Range	T_J	-55 to +150				-55 to +175				°C
Storage Temperature Range	T_{STG}	-55 to +150				-55 to +175				°C

Note: 1. Pulse test: 300µs pulse width, 1% duty cycle.

2. P.C.B. mounted with 0.55"X0.55" (14.0X14.0mm²) copper pad areas.



SS52B-SS520B

5.0 AMP. Schottky Barrier Rectifiers

VOLTAGE RANGE:20-200V

CURRENT:5.0A



Fig.1 Forward Current Derating Curve

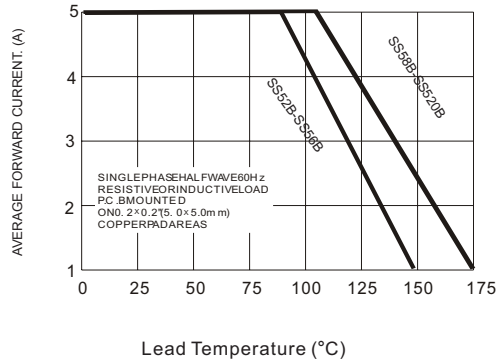


Fig.2 Typical Reverse Characteristics

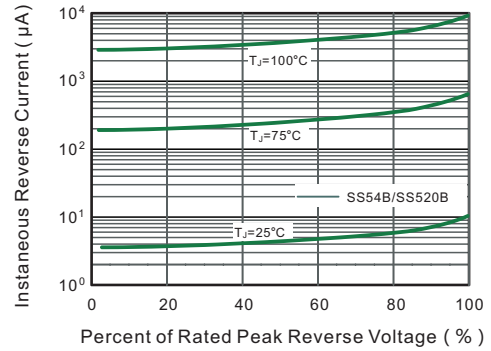


Fig.3 Typical Forward Characteristic

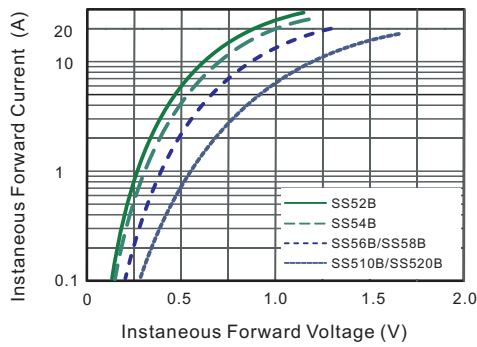


Fig.4 Typical Junction Capacitance

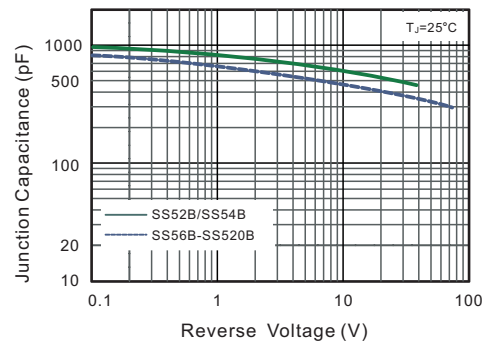


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

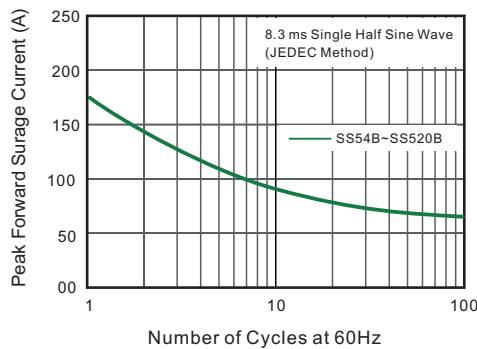
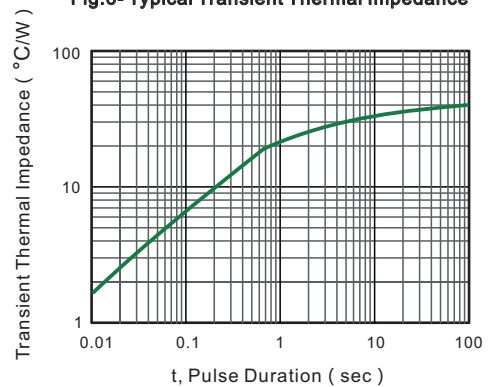


Fig.6- Typical Transient Thermal Impedance



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMB	3000/REEL	48000	36X35.8X36.5	12.00	11.00