



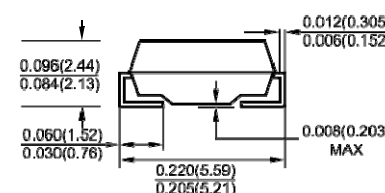
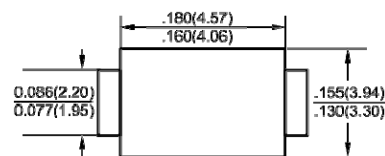
Features

- ◇ 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 CHARACTERS

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 Nummer	Symbol	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
Maxium RMS Voltage	V _{RMS}	14	28	35	42	56	70	105	140	V
Maxium DC Blocking Voltage	V _{DC}	20	40	50	60	80	100	150	200	V
Average Rectified Output Current (Note 1) @T _L =100°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
I2t Rating for Fusing (t < 8.3ms)	I2t	127								A2S
Forward Voltage @IF= 5.0A	V _{FM}	0.45	0.55	0.7		0.85		0.85		V
Peak Reverse Current @TA=25°C	I _R	0.5				0.5				Ma
At Rated DC Blocking Voltage @TA=100°C	I _R	20				10				
Typical Junction Capacitance (Note 2)	C _J	500			350					pF
Typical Thermal Resistance Junction to Ambient(Note 1)	R _{θJA}	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.

Fig.1 Forward Current Derating Curve

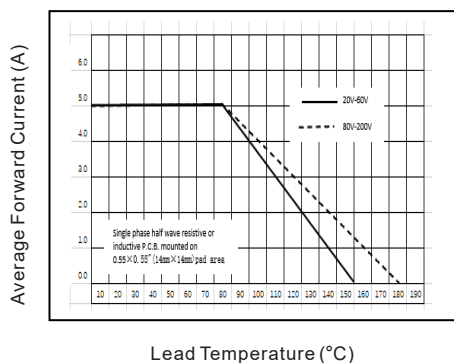


Fig.2 Typical Reverse Characteristics

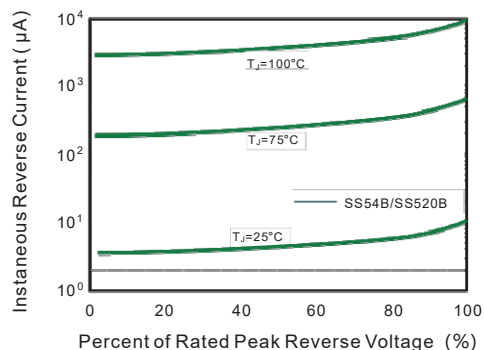


Fig.3 Typical Forward Characteristic

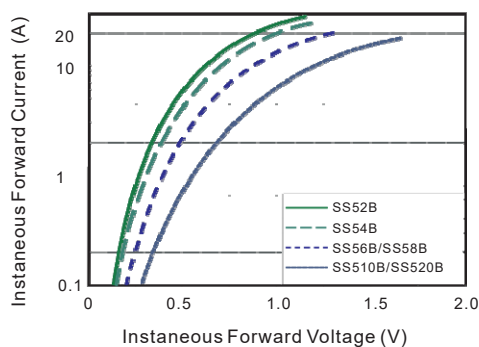


Fig.4 Typical Junction Capacitance

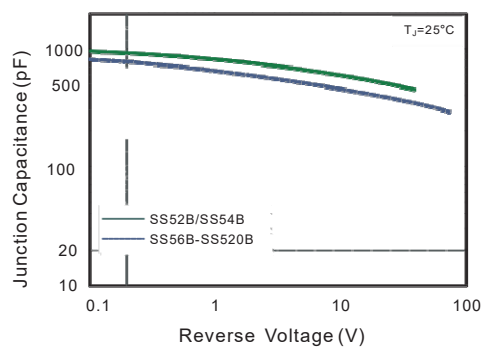


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

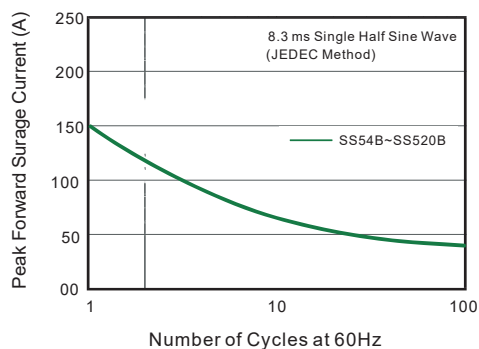


Fig.6- Typical Transient Thermal Impedance

