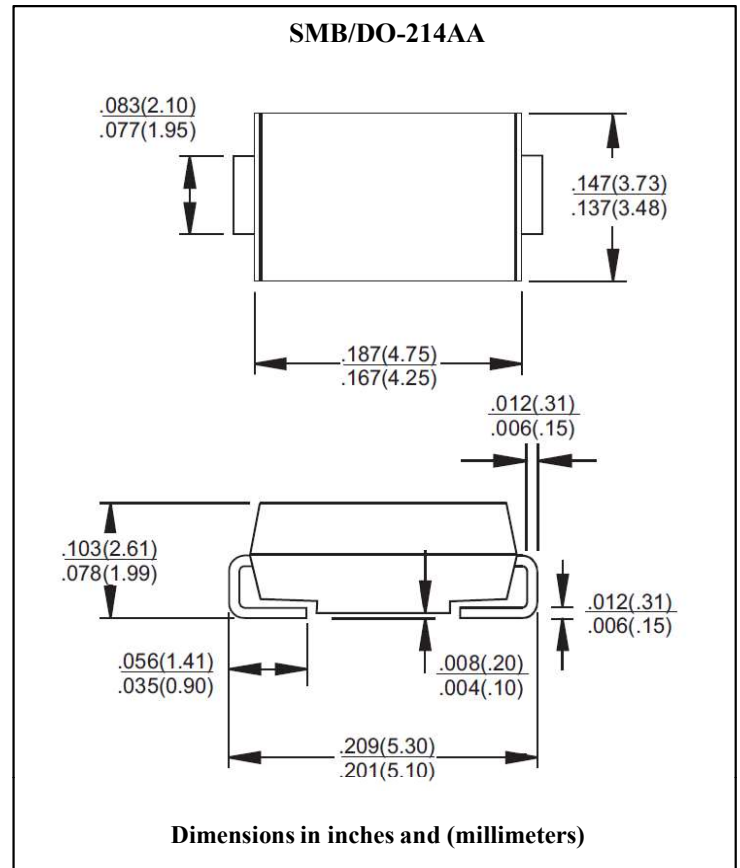
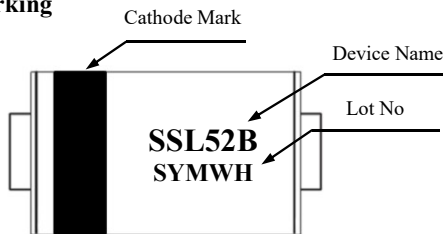


Surface Mount Schottky Barrier Rectifiers
Reverse Voltage 20 to 150 Volts Forward Current 5.0 Ampere
Features

- For surface mounted application
- Metal to silicon rectifier, majority carrier conduction
- Low forward voltage drop
- Easy pick and place
- High surge current capability
- Plastic material used carries underwriters laboratory classification 94V-0
- Epitaxial construction
- High temperature soldering : 260°C /10 seconds at terminals

Mechanical Data

- Case : Molded plastic
- Terminals : Pure tin plated, lead free
- Polarity : Indicated by cathode band
- Packaging : 12mm tape per EIA STD RS-481
- Weight : 0.093gram

Marking

Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

Single phase half wave 60 HZ, resistive or inductive load

For capacitive load, derate current by 20%

Parameter	Symbol	SSL 52B	SSL 53B	SSL 54B	SSL 55B	SSL 56B	SSL 59B	SSL 510B	SSL 515B	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	150	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	105	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	100	V	
Maximum Average Forward Rectified Current at T_L (See Fig.1)	$I_F(AV)$	5.0								A	
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	120								A	
Maximum Instantaneous Forward Voltage @ 5.0A	V_F	0.45		0.65		0.75		0.85		V	Note 1
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	1.0					0.1			mA	$T_a=25^\circ C$
		20		10		2.0				mA	$T_a=125^\circ C$
Typical Thermal Resistance	$R_{th(j-l)}$	19								$^\circ C / W$	Note 3
	$R_{th(j-a)}$	60								$^\circ C / W$	
Operation Junction Temperature Range	T_J	-55 to +150								$^\circ C$	
Storage Temperature Range	T_{STG}	-55 to +150								$^\circ C$	

Note 1. Pulse Test with PW=300usec, 1% Duty Cycle

Note 2. Measured on P.C.Board with 0.4" x 0.4" (10mm x 10mm) Copper Pad Areas



Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

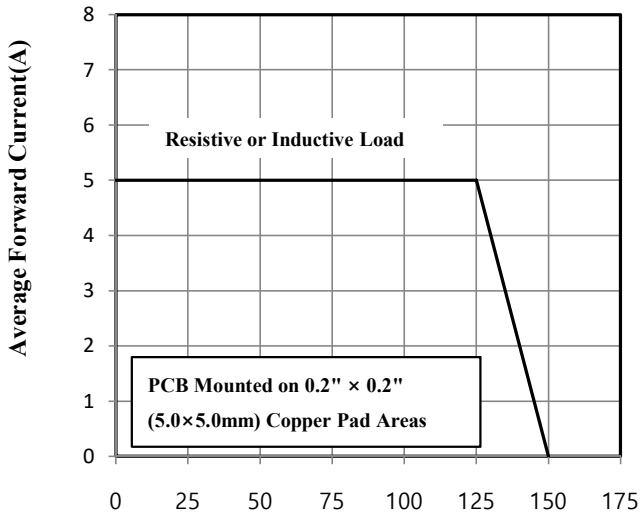


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

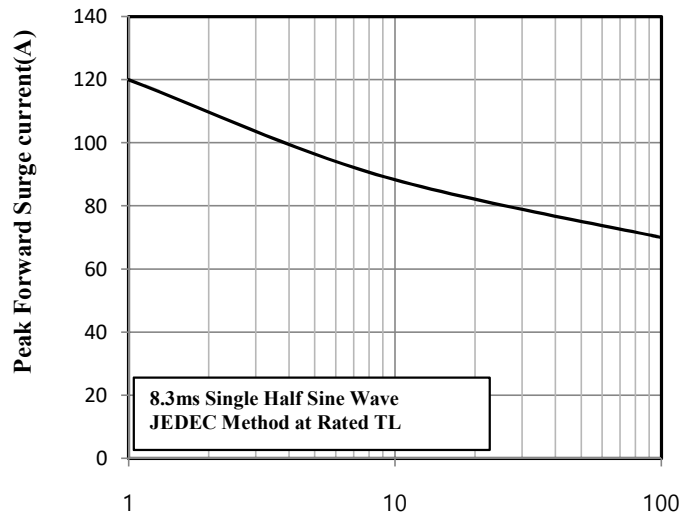


Fig.3 Typical Instantaneous Forward Characteristics

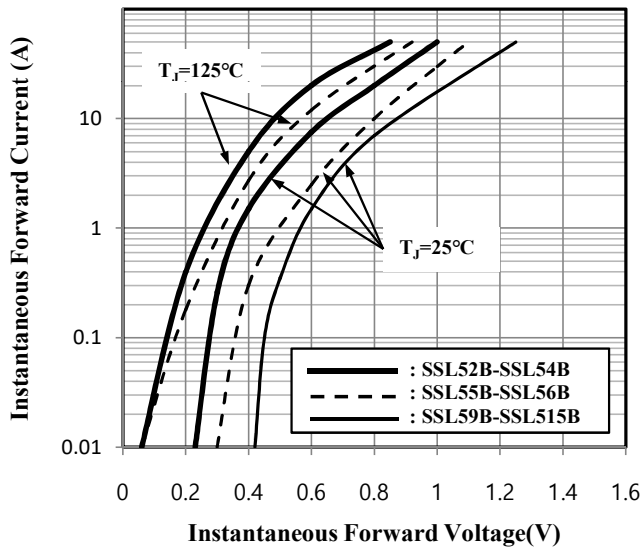


Fig.4 Typical Junction Capacitance

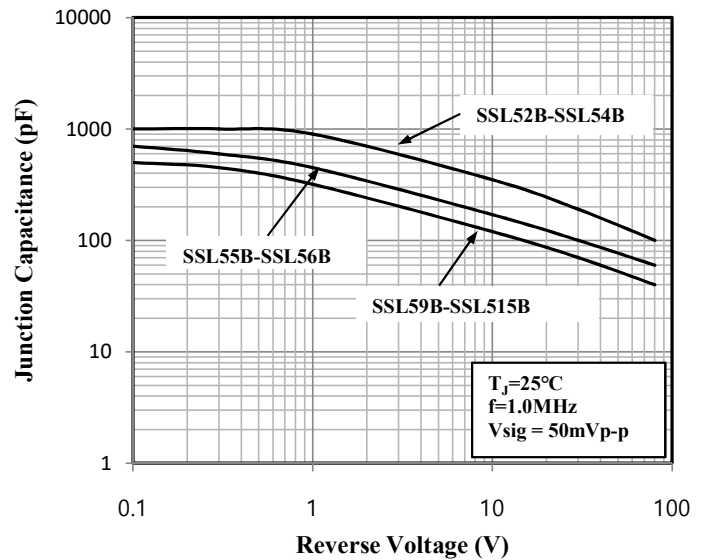


Fig.5 Typical Reverse Characteristics

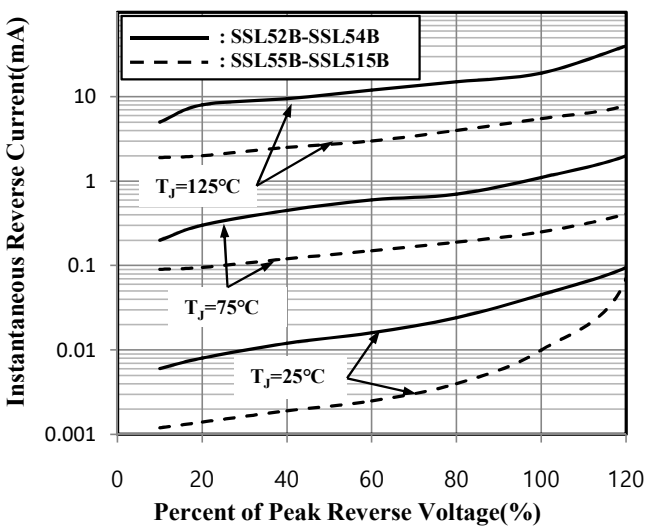


Fig.6 Typical Transient Thermal Characteristics

