



Surface Mount Schottky Barrier Rectifiers

Reverse Voltage 20 to 100 Volts Forward Current 3.0 Amperes

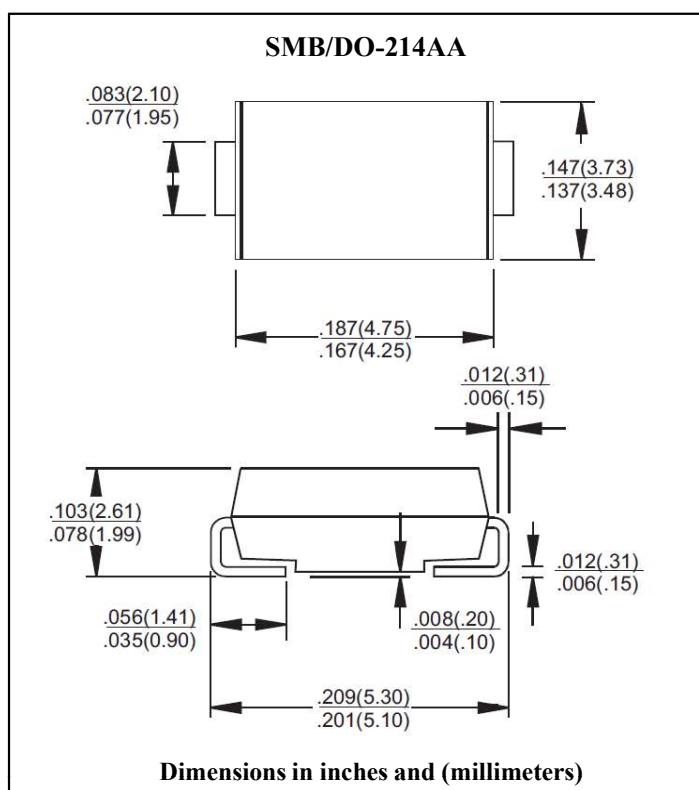
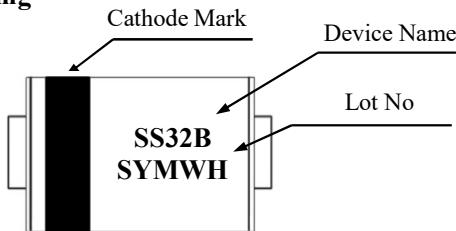
Features

- 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-O
- Epitaxial construction
- High temperature soldering : 260°C /10 seconds at terminals

Mechanical Data

- Case : Molded plastic
- Terminals : Solder plated
- Polarity : Indicated by cathode band
- Packaging : 12mm tape per EIA STD RS-481
- Weight : 0.1gram

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	SS32B	SS33B	SS34B	SS35B	SS36B	SS39B	SS310B	Unit	Remark				
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	90	100	V					
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	V					
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	90	100	V					
Maximum Average Forward Rectified Current at T _L	I _{F(AV)}	3.0						A						
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	100						A						
Maximum Instantaneous Forward Voltage @ 3.0A	V _F	0.50		0.75		0.85		V	Note 1					
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.5			0.6			mA	Ta=25°C					
		20		10		20		mA	Ta=100°C					
Typical Junction Capacitance	C _J	12						pF	Note 2					
Typical Thermal Resistance	R _{th(j-l)}	17						°C /W	Note 3					
	R _{th(j-a)}	55						°C /W						
Operation Junction Temperature Range	T _J	-55 to +125		-55 to +150		-		°C						
Storage Temperature Range	T _{STG}	-55 to +150						°C						

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

Note 2. Measured on P.C.Board with Size 0.6"×0.6" (16mm×16mm) Copper Pad Areas.

Note 3. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C



Ratings and Characteristics Curves ($T_a=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

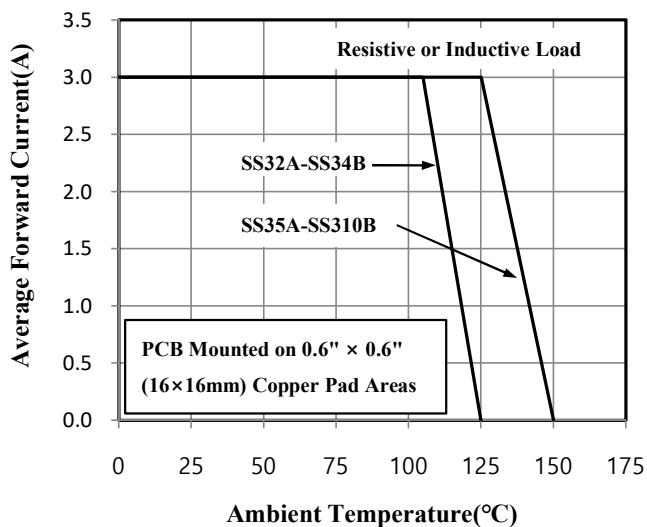


Fig.3 Typical Instantaneous Forward Characteristics

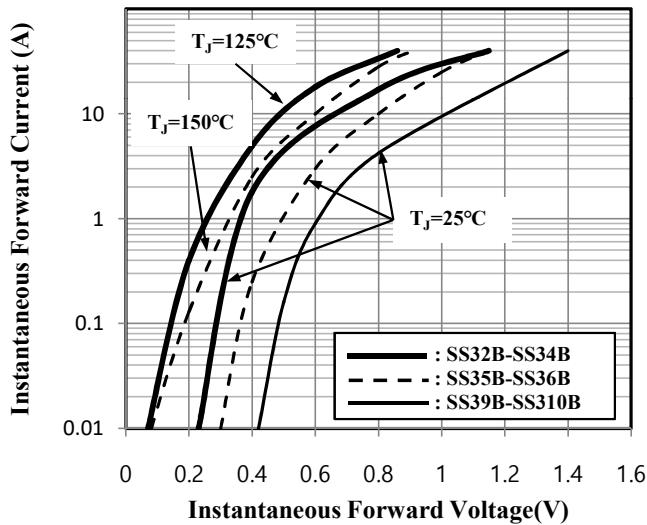


Fig.5 Typical Reverse Characteristics

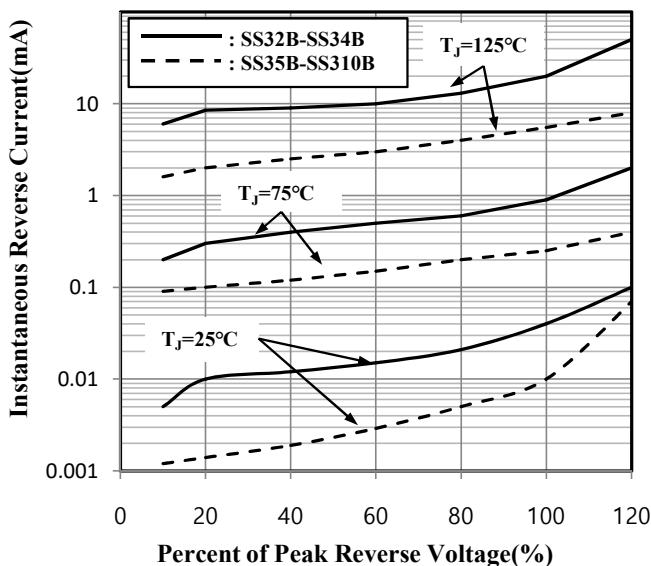


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

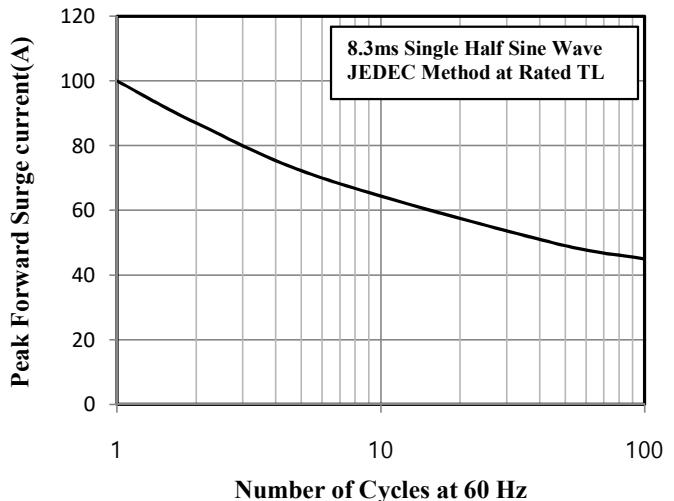


Fig.4 Typical Junction Capacitance

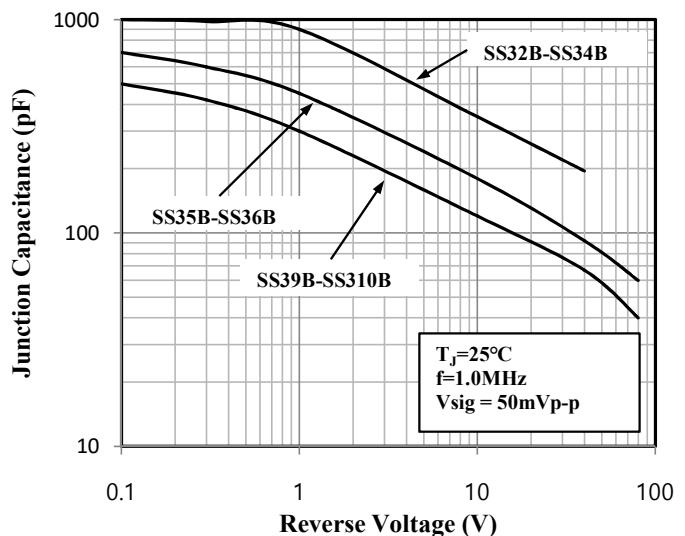


Fig.6 Typical Transient Thermal Impedance

