

**Surface Mount Schottky Barrier Rectifiers**  
**Reverse Voltage 20 to 150 Volts Forward Current 3.0 Amperes**

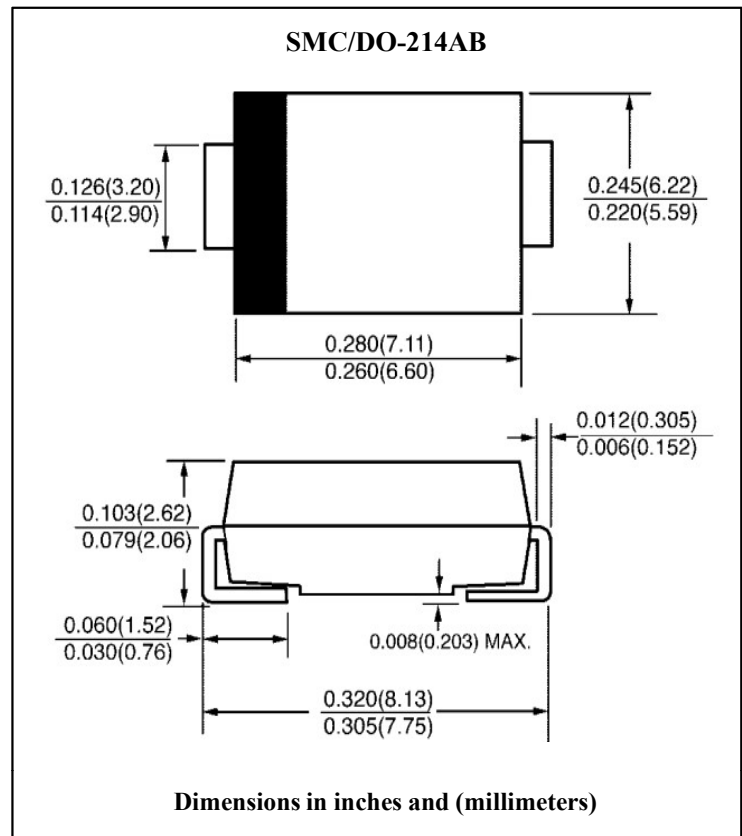
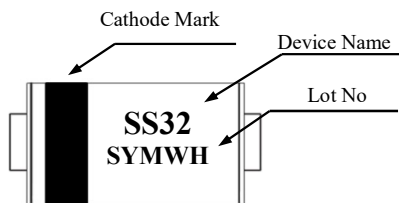
**Features**

- 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 : JEDEC DO-214AB Molded plastic
- Terminals : Pure tin plated, lead free
- Polarity : Indicated by cathode band
- Packaging : 16mm tape per EIA STD RS-481
- Weight : 0.21 gram

**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	SS32	SS33	SS34	SS35	SS36	SS39	SS310	SS315	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	150	V		
Maximum Average Forward Rectified Current at $T_L$ (See Fig.1)	$I_F(AV)$	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		0.95	V	Ta=25°C	
		0.40			0.65		0.70		0.80	V	Ta=100°C	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.5					0.6				mA	Ta=25°C
		20			10		20				mA	Ta=125°C
Typical Thermal Resistance	$R_{th(j-l)}$	17								°C /W	Note 1	
	$R_{th(j-a)}$	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. Measured on P.C.Board with Size 0.6"×0.6" (16mm×16mm ) Copper Pad Areas.



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

Fig.1 Forward Current Derating Curve

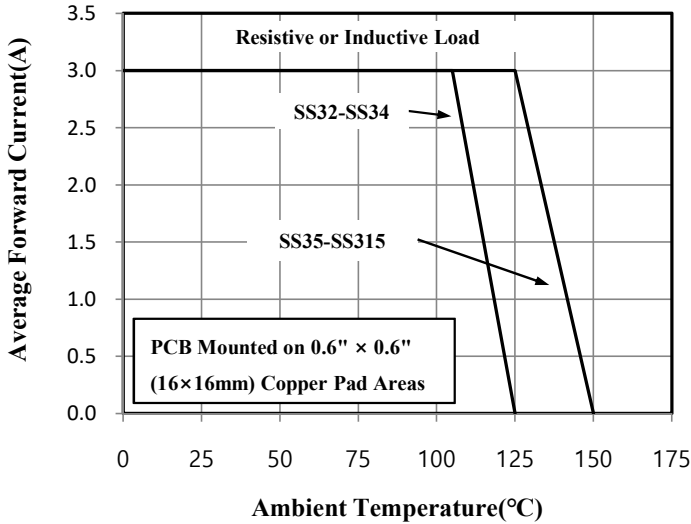


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

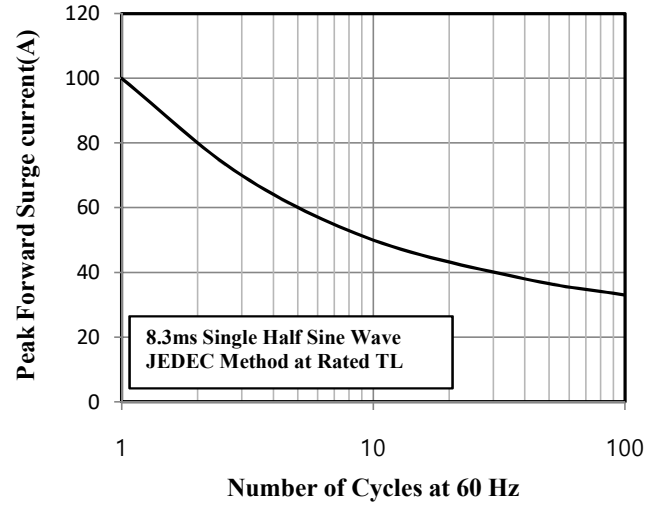


Fig.3 Typical Instantaneous Forward Characteristics

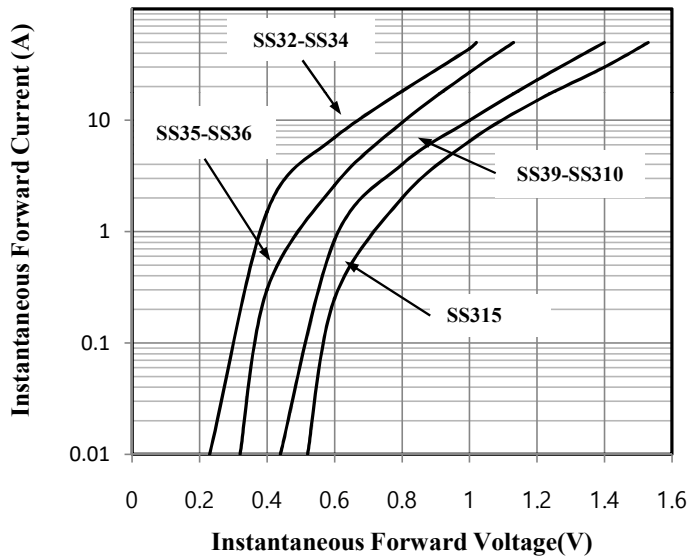


Fig.4 Typical Junction Capacitance

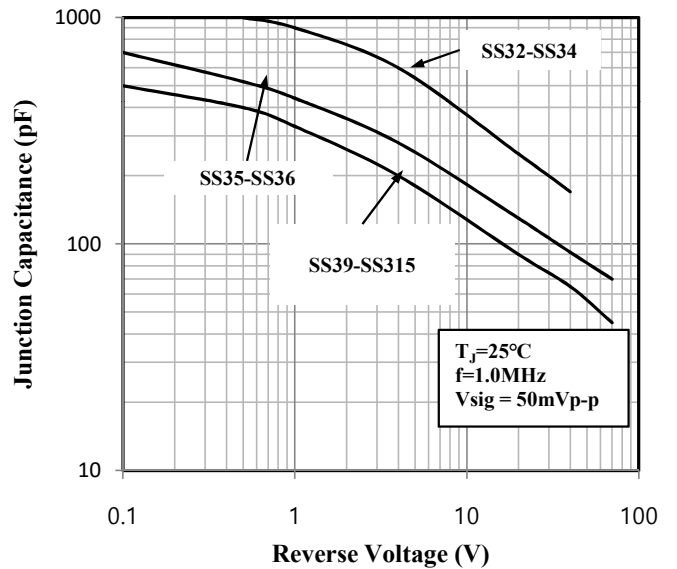


Fig.5 Typical Reverse Characteristics

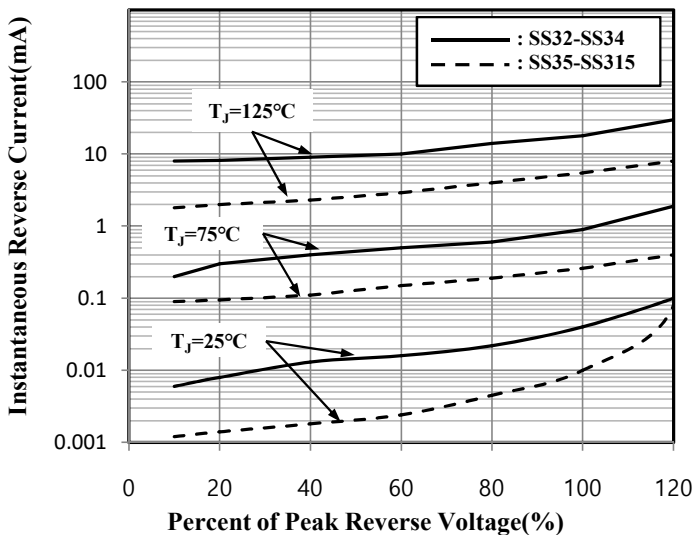


Fig.6 Typical Transient Thermal Characteristics

