



## Surface Mount Schottky Barrier Rectifiers

Reverse Voltage 20 to 100 Volts Forward Current 3.0 Amperes

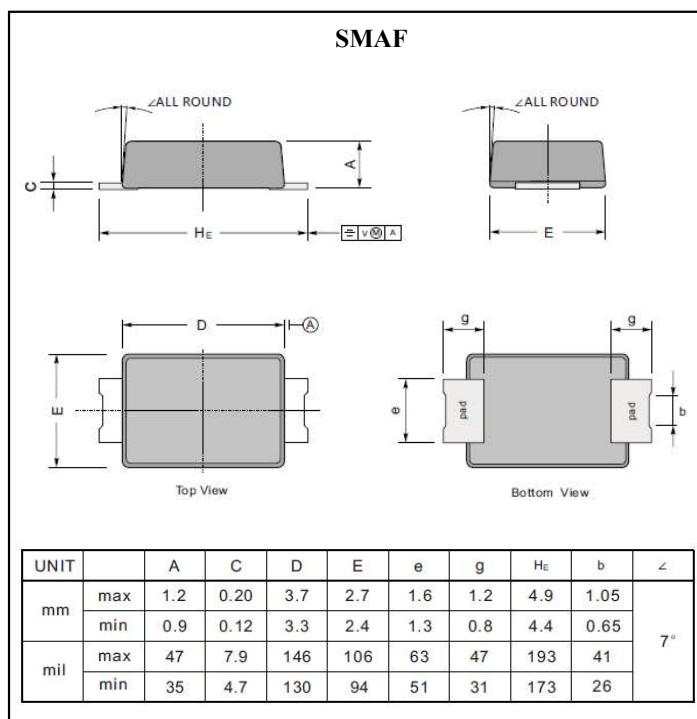
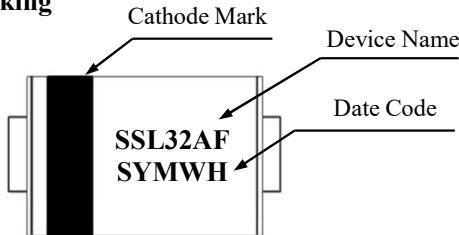
### Features

- 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 : 0.027gram

### 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 32AF	SSL 33AF	SSL 34AF	SSL 35AF	SSL 36AF	SSL 39AF	SSL 310AF	Unit	Remark				
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	90	100	V					
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	63	70	V					
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	90	100	V					
Maximum Average Forward Rectified Current at T <sub>L</sub>	I <sub>F(AV)</sub>	3.0						A						
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	80						A						
Maximum Instantaneous Forward Voltage @ 3.0A	V <sub>F</sub>	0.42		0.50		0.75		V						
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.2				0.05		mA	Ta=25°C					
		50				4.0		mA	Ta=100°C					
Typical Junction Capacitance	C <sub>J</sub>	285						pF						
Maximum Thermal Resistance	R <sub>th(j-a)</sub>	80						°C /W	Note 1					
	R <sub>th(j-t)</sub>	20												
Operation Junction Temperature Range	T <sub>J</sub>	-55 to +125		-55 to +150		-		°C						
Storage Temperature Range	T <sub>STG</sub>	-55 to +150						°C						

Notes 1. Thermal resistance from junction to ambient,  $0.197 \times 0.197" (5.0 \times 5.0\text{mm})$  copper pads to each terminal  
Thermal resistance from junction to terminal,  $0.197 \times 0.197" (5.0 \times 5.0\text{mm})$  copper pads to each terminal



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

Fig.1 Forward Current Derating Curve

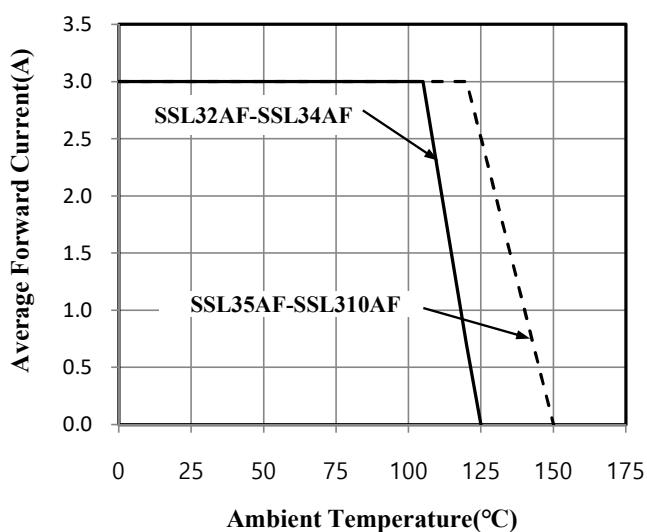


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

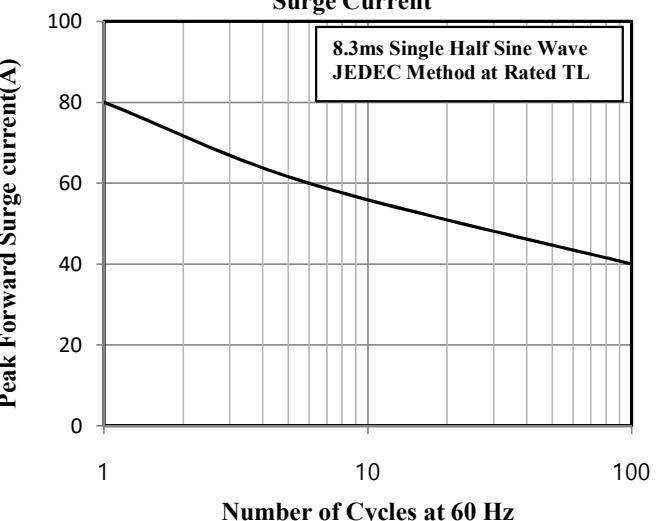


Fig.3 Typical Instantaneous Forward Characteristics

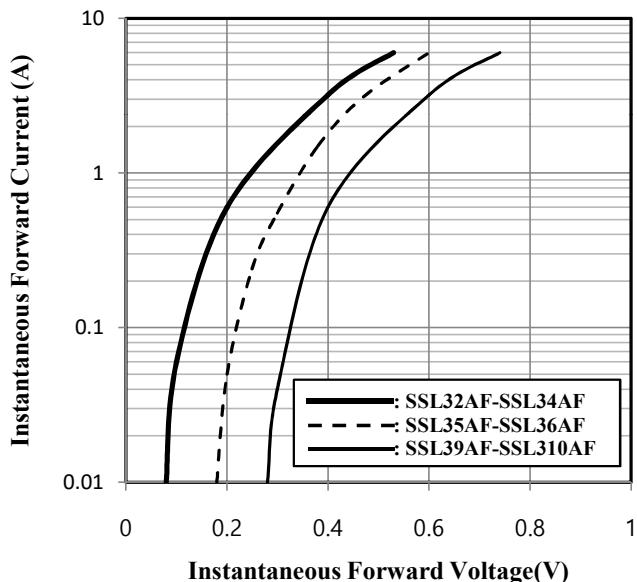


Fig.4 Typical Reverse Characteristics

