



# SS54LC ~SS5200LC

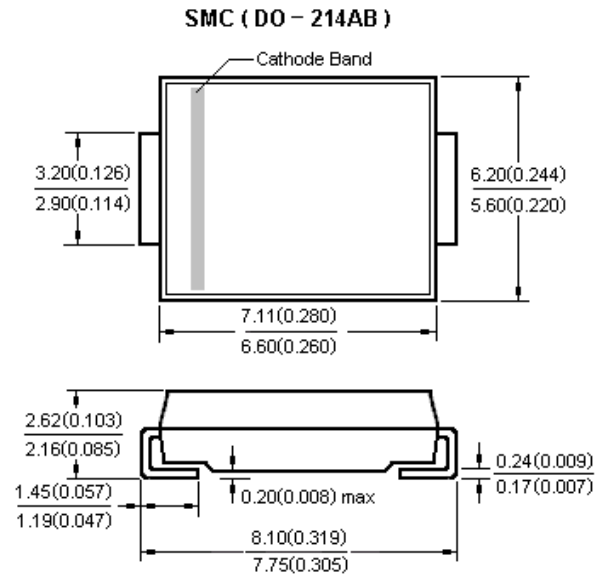
## Surface Mount Low VF Schottky Rectifiers

### Features

- High current capacity, low  $V_F$
- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classification Rating 94V-0

### Mechanical Data

- Case: Molded plastic SMC
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number



Dimensions in millimeters and (inches)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified  
 Single phase, half wave, 60Hz, resistive or inductive load  
 For capacitive load derate current by 20%

Type Number	SYMBOL	SS54LC	SS56LC	SS58LC	SS510LC	SS5150LC	SS5200LC	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	60	80	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	40	60	80	100	150	200	V
Average Rectified Output Current @ $T_L = 90^\circ\text{C}$	$I_{F(AV)}$	5.0						A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	120						A
Forward Voltage @ $I_F = 5.0\text{A}$ (Note 1)	$V_{FM}$	0.45	0.55	0.75		0.85		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	$I_R$	0.2		0.05				mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$		10		5				mA
$I^2t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$	66.47						$\text{A}^2\text{s}$
Typical Junction Capacitance (Note 2)	$C_J$	12						pF
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JA}$	65						$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to +125						$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +125						$^\circ\text{C}$

Note: 1. Pulse Test with  $PW = 300\mu\text{sec}$ , 1% Duty Cycle.

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

3. Thermal Resistance from Junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas.



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### Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Fig. 1 Forward Current Derating Curve

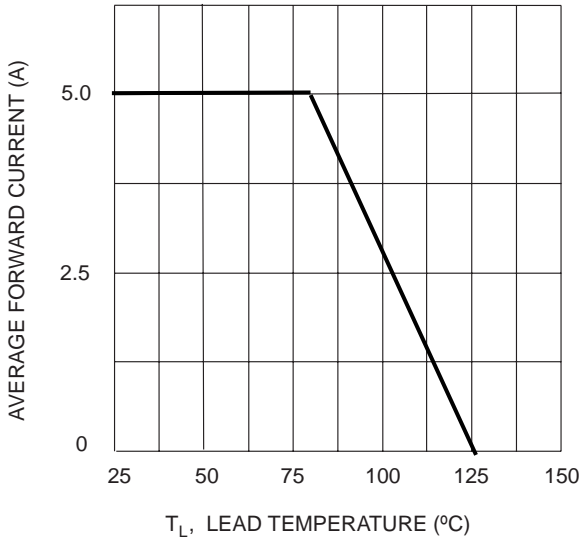


Fig. 2 Typ. Forward Characteristics

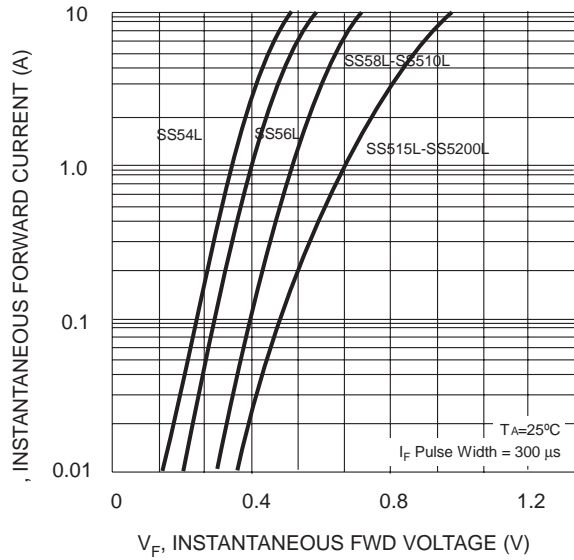


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

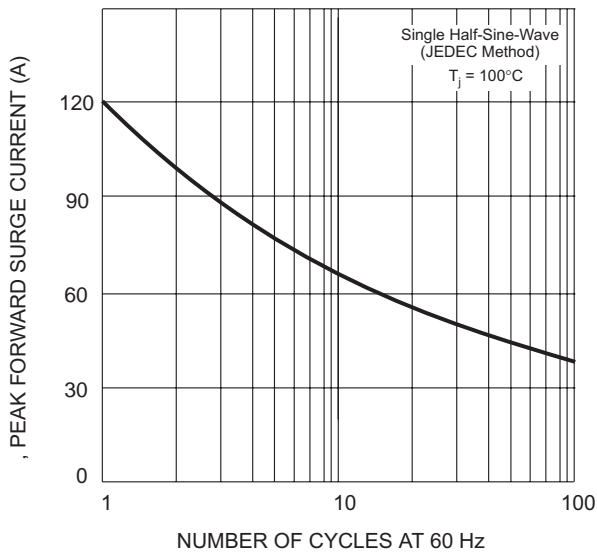


FIG.4 TYPICAL REVERSE CHARACTERISTIC

