

## 2.0 Amp. Surface Mount Low $V_F$ Schottky Barrier Rectifiers

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p><b>RoHS</b> COMPLIANCE</p> </div> <div style="text-align: center;"> <p><b>CASE:</b> <b>SMC/DO-214AB</b></p> </div> </div> <div style="text-align: center; margin-top: 20px;"> <p style="font-size: small;">XX = Marking code WW = Week code Y = Year code</p> <p><b>Dimensions in mm.</b></p> </div>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black;"><b>Voltage</b> 20 V to 40 V</td> <td style="text-align: center; border-bottom: 1px solid black;"><b>Current</b> 3.0 A</td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <ul style="list-style-type: none"> <li>For surface mounted application</li> <li>Metal to silicon junction, majority carrier conduction</li> <li>Low forward voltage drop</li> <li>Easy pick and place</li> <li>High surge current capability</li> <li>Plastic material used carriers Underwriters Laboratory Classification 94V-0</li> <li>Epitaxial construction</li> <li>High temperature soldering: 260 °C / 10 seconds at terminals</li> </ul> </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <p><b>MECHANICAL DATA</b></p> <p>Case: Molded plastic Terminals: Pure tin plated, lead free. Polarity: Indicated by cathode band Packaging: 16 mm tape per EIA-STD RS-481. Weight: 0.021 gram</p> </td> </tr> </table>	<b>Voltage</b> 20 V to 40 V	<b>Current</b> 3.0 A	<ul style="list-style-type: none"> <li>For surface mounted application</li> <li>Metal to silicon junction, majority carrier conduction</li> <li>Low forward voltage drop</li> <li>Easy pick and place</li> <li>High surge current capability</li> <li>Plastic material used carriers Underwriters Laboratory Classification 94V-0</li> <li>Epitaxial construction</li> <li>High temperature soldering: 260 °C / 10 seconds at terminals</li> </ul>		<p><b>MECHANICAL DATA</b></p> <p>Case: Molded plastic Terminals: Pure tin plated, lead free. Polarity: Indicated by cathode band Packaging: 16 mm tape per EIA-STD RS-481. Weight: 0.021 gram</p>	
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### Maximum Ratings and Electrical Characteristics at 25 °C

		FSSL32	FSSL33	FSSL34
Marking code		<b>L32</b>	<b>L33</b>	<b>L34</b>
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	20	30	40
$V_{RMS}$	Maximum RMS Voltage (V)	14	21	28
$V_{DC}$	Maximum DC Blocking Voltage (V)	20	30	40
$I_{F(AV)}$	Maximum Average Forward Rectified Current at $T_L$ (See graphic)	3.0 A		
$I_{FSM}$	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	100 A		
$T_j$	Operating Temperature Range	-55°C to +125°C		
$T_{stg}$	Storage Temperature Range	-55°C to +150°C		

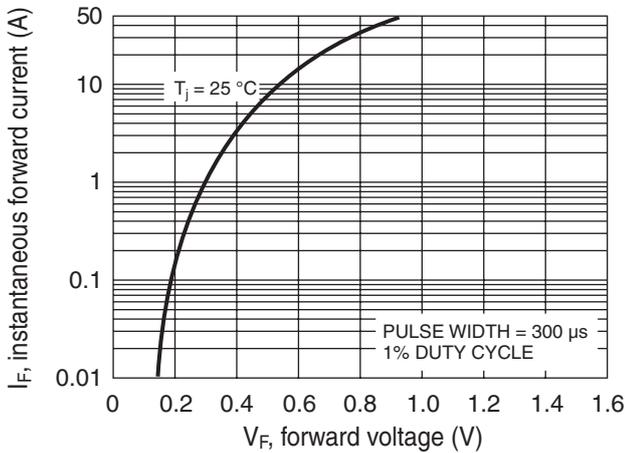
### Electrical Characteristics at $T_{amb} = 25\text{ °C}$

$V_F$	Maximum Instantaneous Forward Voltage (Note 1) @ 3.0 A	0.41 V	
$I_R$	Maximum DC Reverse Current @ $T_A = 25\text{ °C}$	0.2 mA	0.5 mA
	at Rated DC Blocking Voltage @ $T_A = 100\text{ °C}$	50 mA	100 mA
$R_{th(j-l)}$ $R_{th(j-a)}$	Typical Thermal Resistance (Note 2)	17 °C/W 55 °C/W	

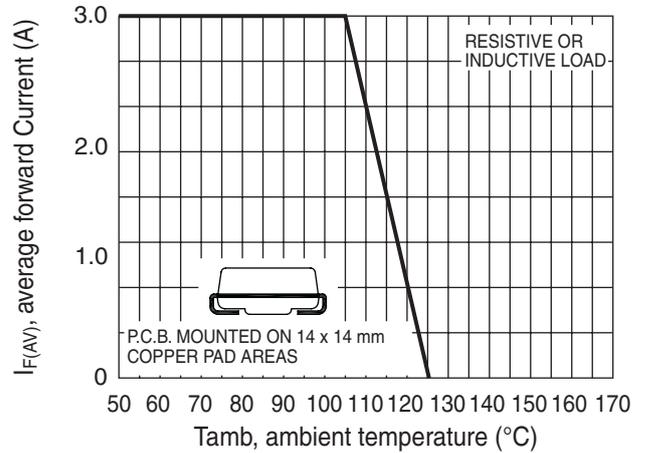
NOTES: 1. Pulse Test With PW = 300  $\mu$ sec, 1% Duty Cycle  
2. Measured on P.C. Board with 16mm x 16mm Copper Pad Areas.

**Rating And Characteristic Curves**

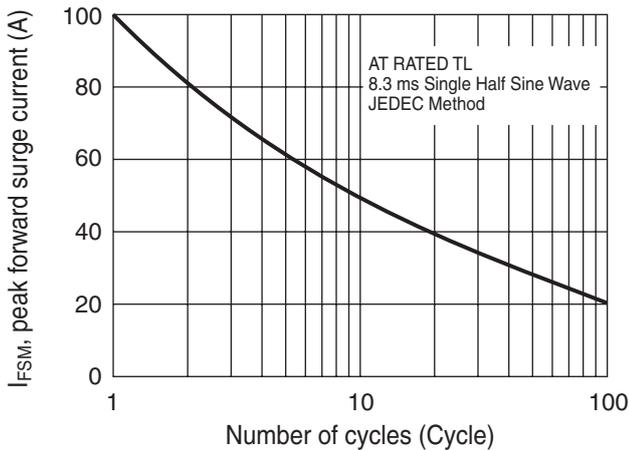
**TYPICAL FORWARD CHARACTERISTIC**



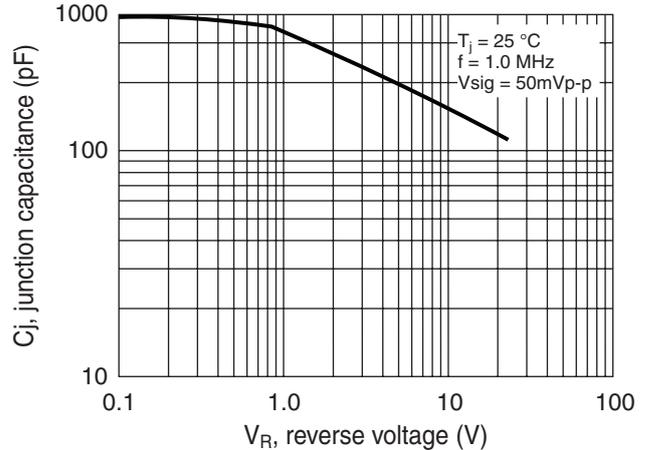
**MAXIMUM FORWARD CURRENT DERATING CURVE**



**MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**TYPICAL JUNCTION CAPACITANCE**



**TYPICAL REVERSE CHARACTERISTIC**

