

**1.0 Amp. Surface Mount Low  $V_F$  Schottky Barrier Rectifiers**

<p><b>RoHS COMPLIANCE</b></p> <p><b>CASE: SMA/DO-214AC</b></p> <p>XX = Marking code WW = Week code Y = Year code</p> <p><b>Dimensions in mm.</b></p>	<p><b>Voltage</b> 20 V to 40 V</p>	<p><b>Current</b> 1.0 A</p>
	<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: 12 mm tape per EIA-STD RS-481. Weight: 0.064 gram</p>	

**Maximum Ratings and Electrical Characteristics at 25 °C**

		FSSL12	FSSL13	FSSL14
Marking code		<b>1A</b>	<b>1B</b>	<b>1C</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)	1.0 A		
$I_{FSM}$	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	50 A		
$T_j$	Operating Temperature Range	-55°C to +125°C		
$T_{stg}$	Storage Temperature Range	-55°C to +150°C		

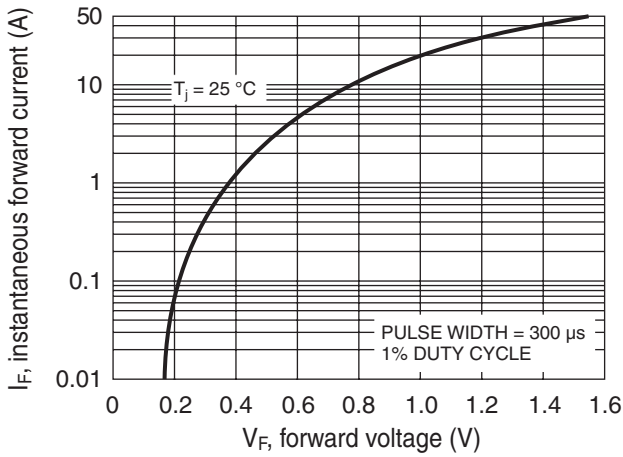
**Electrical Characteristics at  $T_{amb} = 25 °C$**

$V_F$	Maximum Instantaneous Forward Voltage (Note 1) @ 1.0 A	0.39 V
$I_R$	Maximum DC Reverse Current @ $T_A = 25 °C$	0.2 mA
	at Rated DC Blocking Voltage @ $T_A = 100 °C$	50 mA
$R_{th(j-l)}$ $R_{th(j-a)}$	Typical Thermal Resistance (Note 2)	28 °C/W 88 °C/W

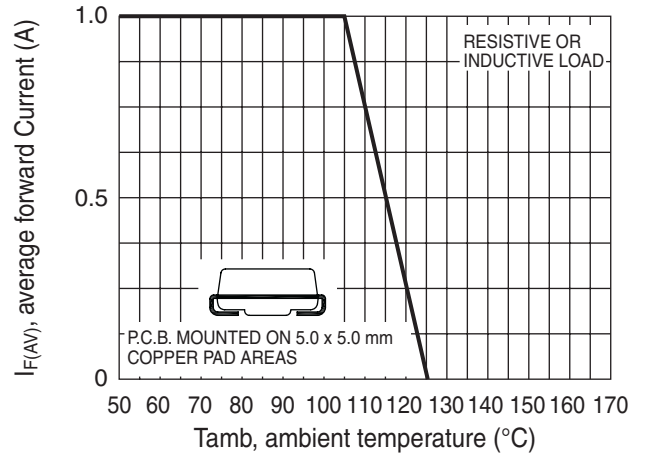
NOTES: 1. Pulse Test With PW = 300 µsec, 1% Duty Cycle  
2. Measured on P.C. Board with 5mm x 5mm Copper Pad Areas.

**Rating And Characteristic Curves**

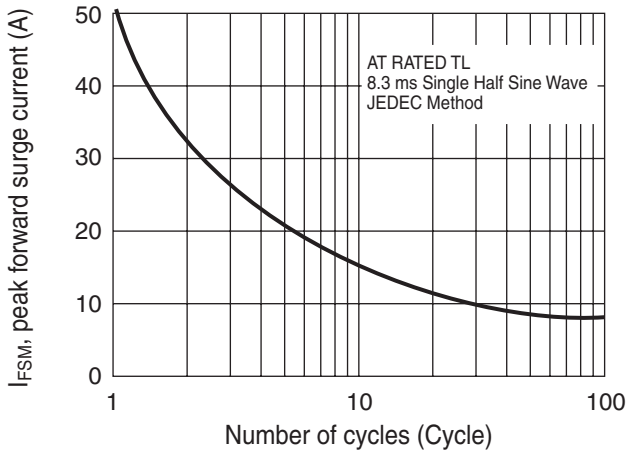
**TYPICAL FORWARD CHARACTERISTIC**



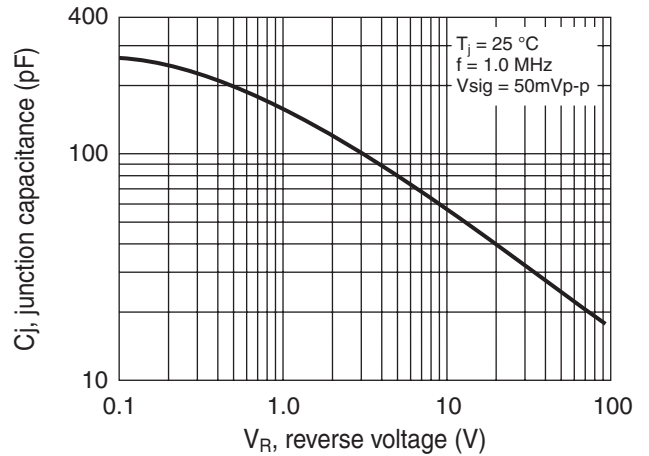
**MAXIMUM FORWARD CURRENT DERATING CURVE**



**MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**TYPICAL JUNCTION CAPACITANCE**



**TYPICAL REVERSE CHARACTERISTIC**

