

2.0 Amp. Surface Mount Low V_F Schottky Barrier Rectifiers

<p>RoHS COMPLIANCE</p> <p>CASE: SMB/DO-214AA</p> <p>XX = Marking code WW = Week code Y = Year code</p> <p>Dimensions in mm.</p>	<p>Voltage 20 V to 40 V</p>	<p>Current 2.0 A</p>
	<ul style="list-style-type: none"> • For surface mounted application • Metal to silicon junction, majority carrier conduction • Low forward voltage drop • Easy pick and place • High surge current capability • Plastic material used carriers Underwriters Laboratory Classification 94V-0 • Epitaxial construction • High temperature soldering: 260 °C / 10 seconds at terminals 	
	<p>MECHANICAL DATA</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: 0.093 gram</p>	

Maximum Ratings and Electrical Characteristics at 25 °C

		FSSL22	FSSL23	FSSL24
Marking code		2A	2B	2C
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)	2.0 A		
I_{FSM}	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	80 A		
T_j	Operating Temperature Range	-55°C to +125°C		
T_{stg}	Storage Temperature Range	-55°C to +150°C		

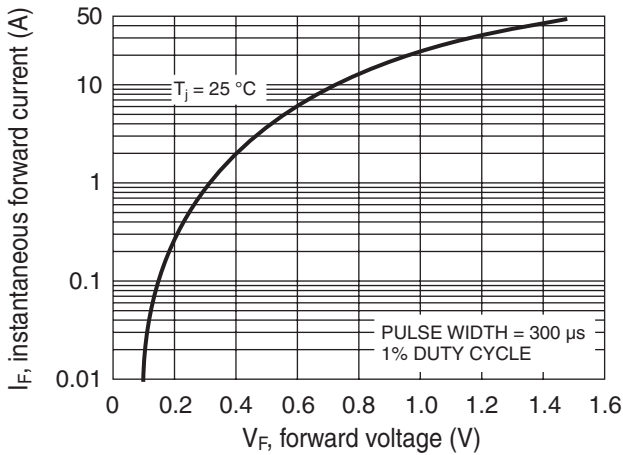
Electrical Characteristics at $T_{amb} = 25\text{ °C}$

V_F	Maximum Instantaneous Forward Voltage (Note 1) @ 2.0 A	0.41 V	
I_R	Maximum DC Reverse Current @ $T_A = 25\text{ °C}$ at Rated DC Blocking Voltage @ $T_A = 100\text{ °C}$	0.4 mA	
		50 mA	60 mA
$R_{th(j-l)}$ $R_{th(j-a)}$	Typical Thermal Resistance (Note 2)	25 °C/W 70 °C/W	

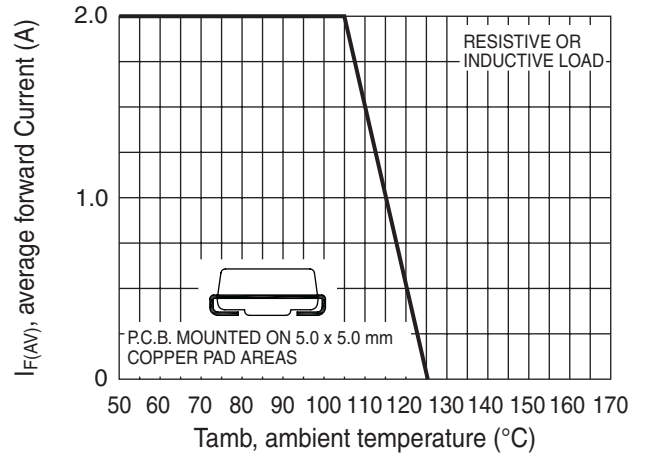
NOTES: 1. Pulse Test With PW = 300 μ sec, 1% Duty Cycle
2. Measured on P.C. Board with 10mm x 10mm Copper Pad Areas.

Rating And Characteristic Curves

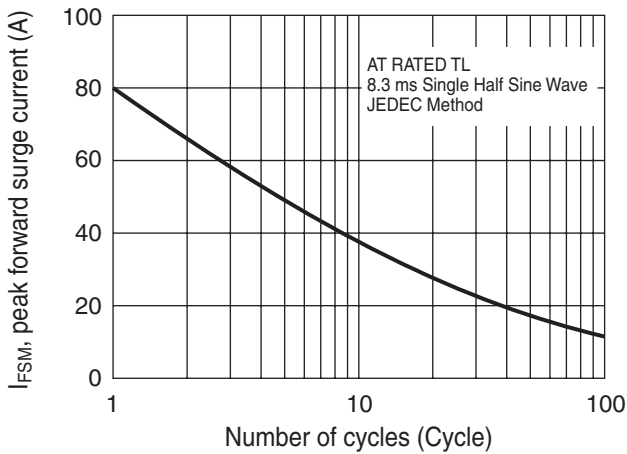
TYPICAL FORWARD CHARACTERISTIC



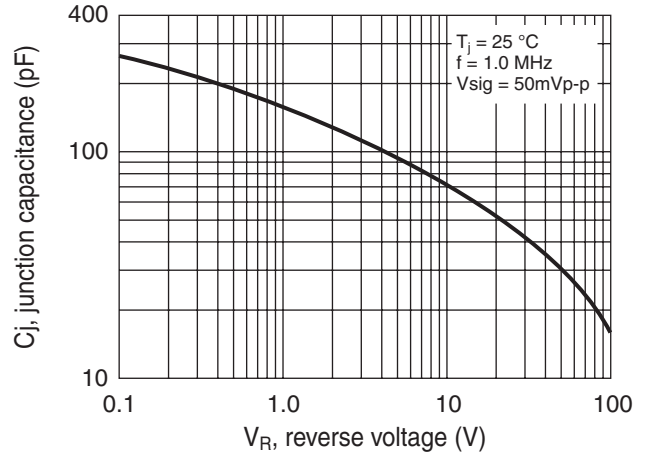
MAXIMUM FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



TYPICAL REVERSE CHARACTERISTIC

