

## 2 Amp. Surface Mount Schottky Barrier Rectifiers

<p><b>RoHS COMPLIANCE</b></p> <p><b>CASE: SMB/DO-214AA</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 150 V</p> <p><b>Current</b> 2.0 A</p>
	<ul style="list-style-type: none"> <li>• For surface mounted application</li> <li>• Easy pick and place</li> <li>• Metal to silicon rectifier, majority carrier conduction</li> <li>• Low power loss, high efficiency</li> <li>• High current capability, low VF</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> Case: Molded plastic Terminals: Pure tin plated, lead free Polarity: Indicated by cathode band Packaging: 12 mm tape EIA-STD RS-481. Weight: 0.093 g.</p>

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

		FSS 22	FSS 23	FSS 24	FSS 25	FSS 26	FSS 29	FSS 210	FSS 215	
	Marking code	B1	B2	B3	B4	B5	BA	BB	BC	
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	20	30	40	50	60	90	100	150	
$V_{RMS}$	Maximum RMS Voltage (V)	14	21	28	35	42	63	70	105	
$V_{DC}$	Maximum DC Blocking Voltage (V)	20	30	40	50	60	90	100	150	
$I_{F(AV)}$	Forward Current at $T_L$ (See graphic)	2.0 A								
$I_{FSM}$	8.3 ms. Peak Forward Surge Current (Jedec Method)	50 A								
$T_j$	Operating Temperature Range	-65°C to +125°C			-65°C to +150°C					
$T_{stg}$	Storage Temperature Range	-65°C to +150°C								

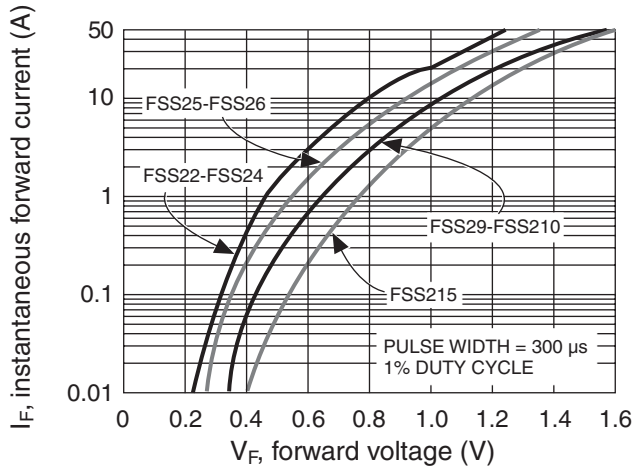
### Electrical Characteristics at $T_{amb} = 25\text{ °C}$

$V_F$	Maximum Instantaneous Forward Voltage (Note 1) $I_F = 2.0\text{ A}$ @ 25 °C @ 100 °C	0.5 V 0.4 V	0.70 V 0.65 V	0.85 V 0.70 V	0.95 V 0.80 V
$I_R$	Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 125\text{ °C}$	0.4 mA		0.1 mA	
$C_j$	Typical Junction Capacitance (Note 3)	10 mA	5.0 mA		
$R_{th(j-l)}$ $R_{th(j-a)}$	Typical Thermal Resistance (Note 2)	200 pF	130 pF	48 pF	
		88 °C/W			
		28 °C/W			

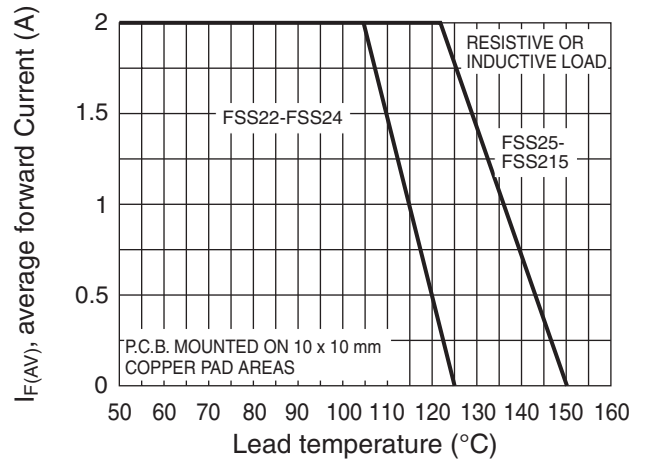
NOTES: 1. Pulse Test With PW = 300 µsec, 1% Duty Cycle  
2. Measured on P.C. Board with 10mm x10mm Copper Pad Areas  
3. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

**Rating And Characteristic Curves**

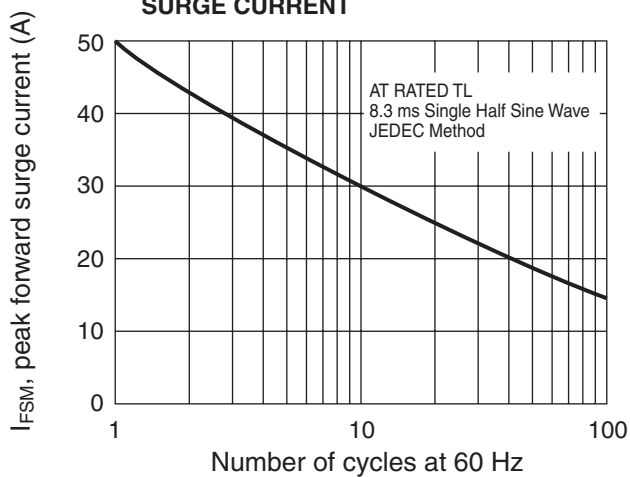
**TYPICAL FORWARD CHARACTERISTIC**



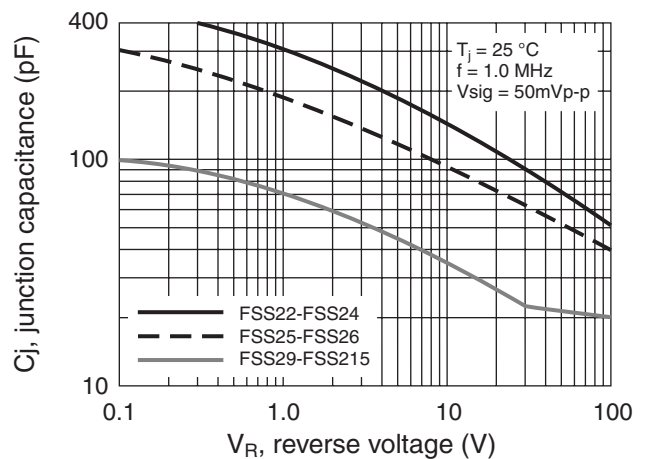
**MAXIMUM FORWARD CURRENT DERATING CURVE**



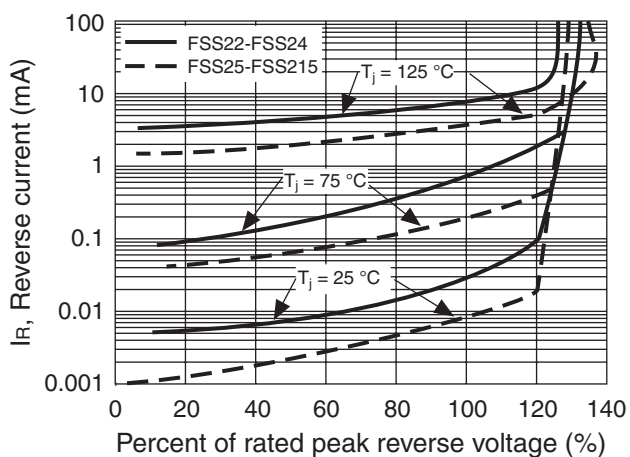
**MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**TYPICAL JUNCTION CAPACITANCE**



**TYPICAL REVERSE CHARACTERISTIC**



**TYPICAL TRANSIENT THERMAL CHARACTERISTIC**

