

## 1 Amp. Surface Mount High Temperature 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>SMB/DO-214AA</b></p> </div> </div> <div style="text-align: right; padding-right: 10px;"> <p><b>Voltage</b> 100 V</p> <p><b>Current</b> 1.0 A</p> </div>	<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> <li>High temperature performance</li> </ul> <p><b>MECHANICAL DATA</b></p> <p>Case: JEDEC SMB / DO-214AA 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>
<p style="text-align: center;">XX = Marking code          WW = Week code          Y = Year code</p> <p style="text-align: center;"><b>Dimensions in mm.</b></p>	<p><b>MECHANICAL DATA</b></p> <p>Case: JEDEC SMB / DO-214AA 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

		<b>FSSH110B</b>
	Marking code	<b>AI</b>
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	100
$V_{RMS}$	Maximum RMS Voltage (V)	70
$V_{DC}$	Maximum DC Blocking Voltage (V)	100
$I_{F(AV)}$	Forward Current at $T_L$ (See graphic)	1.0 A
$I_{FSM}$	8.3 ms. Peak Forward Surge Current (Jedec Method)	30 A
$T_j$	Operating Temperature Range	-65°C to +175°C
$T_{stg}$	Storage Temperature Range	-65°C to +175°C

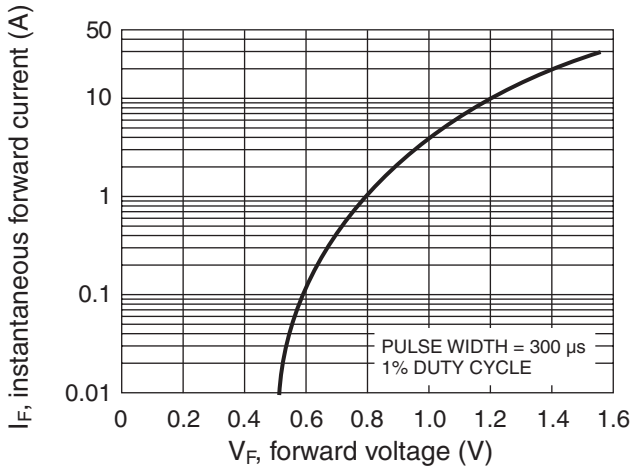
### Electrical Characteristics at $T_{amb} = 25\text{ °C}$

$V_F$	Maximum Instantaneous Forward Voltage (Note 1) $I_F = 1.0\text{ A}$ @ 25 °C @ 100 °C	0.80 V
		0.70 V
$I_R$	Maximum DC Reverse Current $T_a = 25\text{ °C}$ at	0.5 mA
	Rated DC Blocking Voltage $T_a = 125\text{ °C}$	5.0 mA
$R_{th(j-i)}$	Typical Thermal Resistance (Note 2)	28 °C/W
$R_{th(j-a)}$		88 °C/W

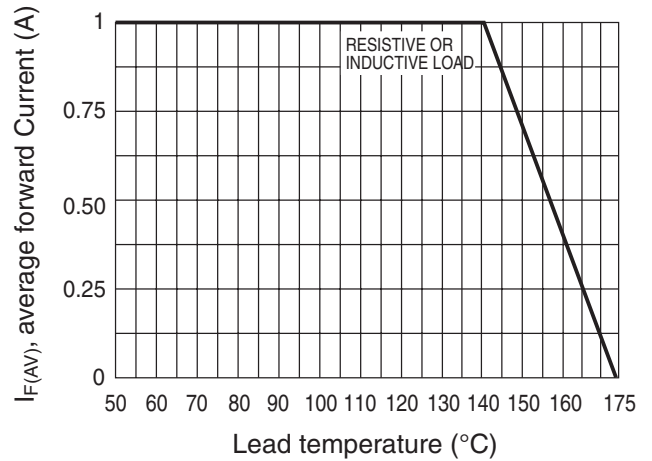
NOTES: 1. Pulse Test With PW = 300 μsec, 1% Duty Cycle  
 2. Measured on P.C. Board with 5.0mm x 5.0mm Copper Pad Areas

**Rating And Characteristic Curves**

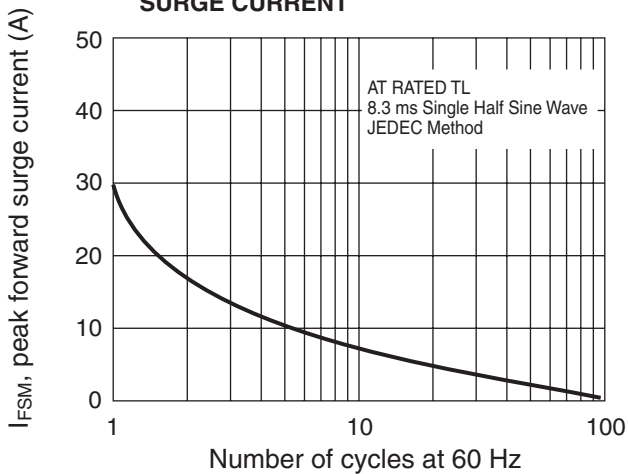
**TYPICAL FORWARD CHARACTERISTIC**



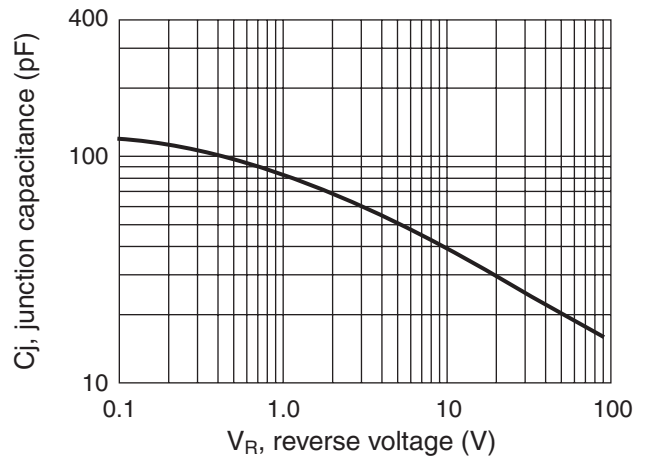
**MAXIMUM FORWARD CURRENT DERATING CURVE**



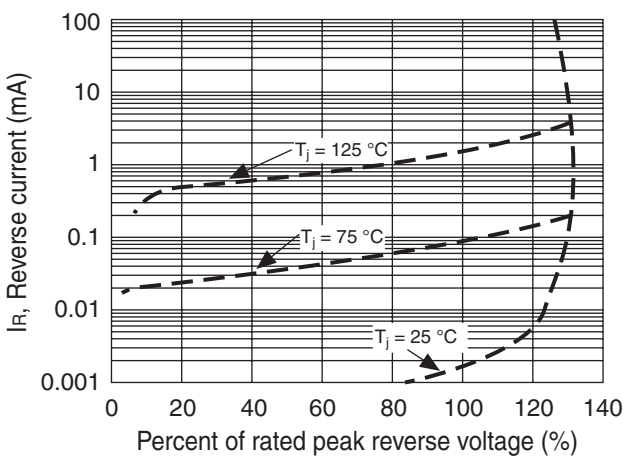
**MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**TYPICAL JUNCTION CAPACITANCE**



**TYPICAL REVERSE CHARACTERISTIC**



**TYPICAL TRANSIENT THERMAL CHARACTERISTIC**

