

## 2 Amp. Surface Mounted Schottky Barrier Rectifier

|   |   |  |
|---|---|--|
| <p>Dimensions in mm.</p> <p>Top view dimensions: 5.1 ± 0.3, 1.25 ± 0.25, 1.25 ± 0.25, 0.2, 1.05 ± 0.2, 2.2 ± 0.3.</p> <p>Side view dimensions: 0.15 ± 0.1.</p> <p>Marking view dimensions: 2 ± 0.3, 3.5 ± 0.3, 2.4, 2.0, 4.2.</p> <p>Marking: F4, I2, G, Week code, Year code, Type No. Class.</p> <p>Standard soldering pad dimensions: 2.4, 2.0, 4.2.</p>   | <p>CASE:<br/>SMB/DO-214AA<br/>(Plastic)</p> | <p>Voltage<br/>20 V to 60 V</p> <p>Current<br/>2.0 A</p> |
| <ul style="list-style-type: none"> <li>• Metal Silicon Junction, majority carrier conduction</li> <li>• High current capability, low forward voltage drop</li> <li>• Guardring for overvoltage protection</li> <li>• Low power loss, high efficiency</li> <li>• High surge capability</li> <li>• Plastic material carries U/L recognition 94VO</li> <li>• Low profile package</li> <li>• Easy pick and place</li> </ul> |   |  |

### Maximum Ratings, according to IEC publication No. 134

|              |  | FSS22            | FSS23 | FSS24 | FSS25            | FSS26 |
|--------------|--|------------------|-------|-------|------------------|-------|
| Marking Code |  | B1               | B2    | B3    | B4               | B5    |
| $V_{RRM}$    | Peak recurrent reverse voltage (V)                   | 20               | 30    | 40    | 50               | 60    |
| $V_{RMS}$    | Maximum RMS voltage (V)                              | 14               | 21    | 28    | 35               | 42    |
| $V_{DC}$     | Maximum DC blocking voltage (V)                      | 20               | 30    | 40    | 50               | 60    |
| $I_{F(AV)}$  | Maximum average Forward current.                     | 2 A              |       |       |                  |       |
| $I_{FSM}$    | 8.3 ms. peak forward surge current<br>(Jedec Method) | 50 A             |       |       |                  |       |
| $T_j$        | Operating temperature range                          | - 65 to + 125 °C |       |       | - 65 to + 150 °C |       |
| $T_{stg}$    | Storage temperature range                            | - 65 to + 150 °C |       |       |                  |       |

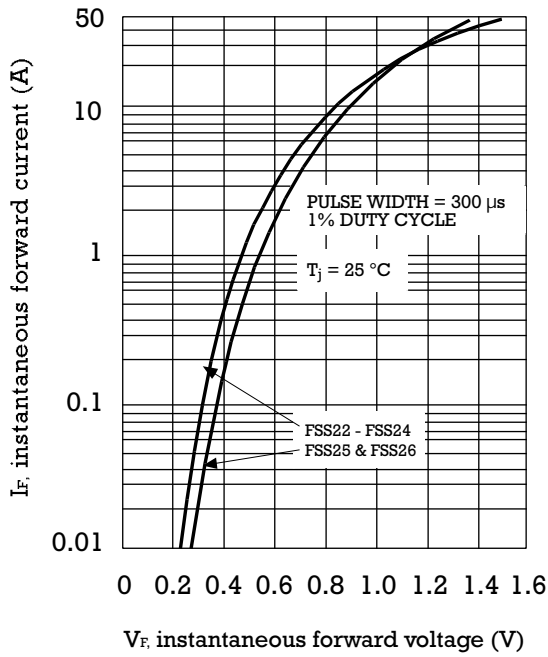
### Electrical Characteristics at $T_{amb} = 25\text{ °C}$

|                            |  |                    |        |
|----------------------------|--|--------------------|--------|
| $V_F$                      | Max. forward voltage drop at $I_F = 2.0\text{ A}^{(1)}$  | 0.55 V             | 0.70 V |
| $I_R$                      | Max. Instantaneous reverse current at $V_{RRM}^{(1)}$<br>$T_a = 25\text{ °C}$<br>$T_a = 100\text{ °C}$ | 0.5 mA             |        |
|                            |  | 20 mA              | 10 mA  |
| $R_{thj-a}$<br>$R_{thj-l}$ | Maximum Thermal Resistance   | 75 °C/W<br>17 °C/W |        |

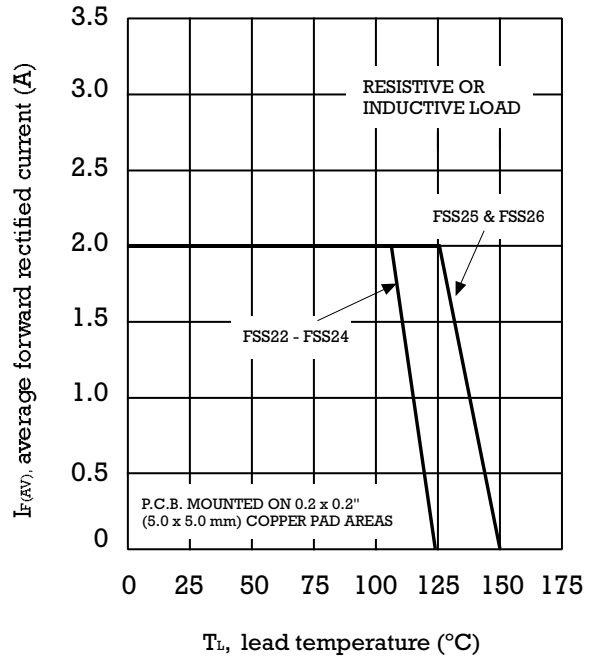
NOTE: Thermal Resistance from junction to lead or to ambient PCB mounted with 5x5 mm copper pads areas.

(1) Pulse test: 300µs pulse width, 1% duty cycle.

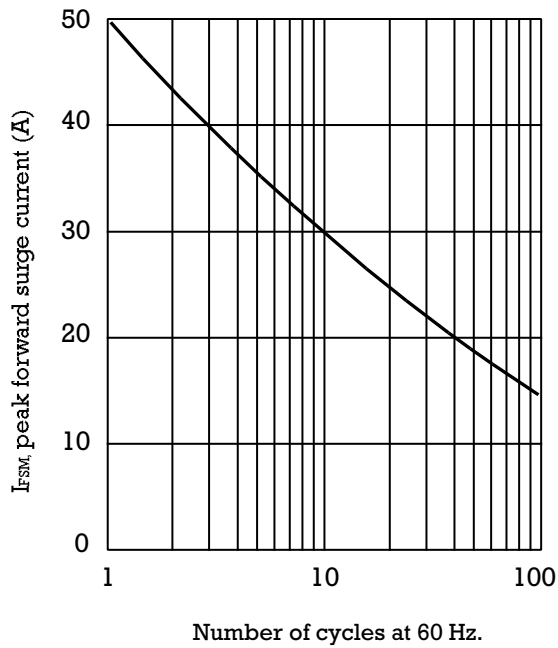
TYPICAL FORWARD CHARACTERISTIC



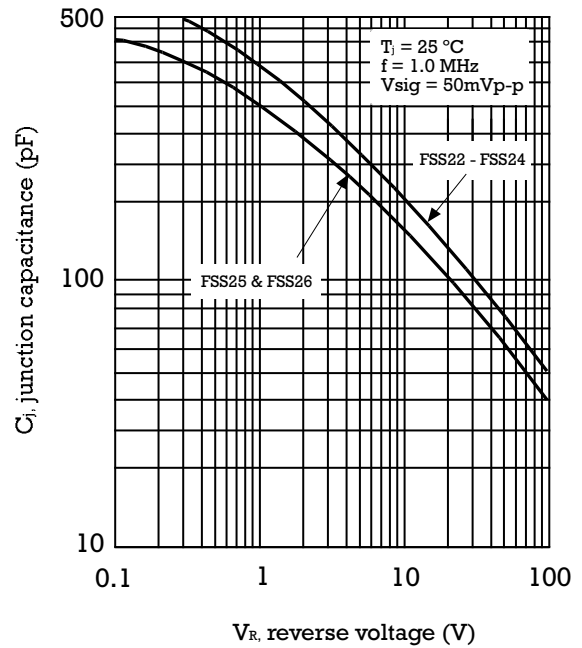
FORWARD CURRENT DERATING CURVE



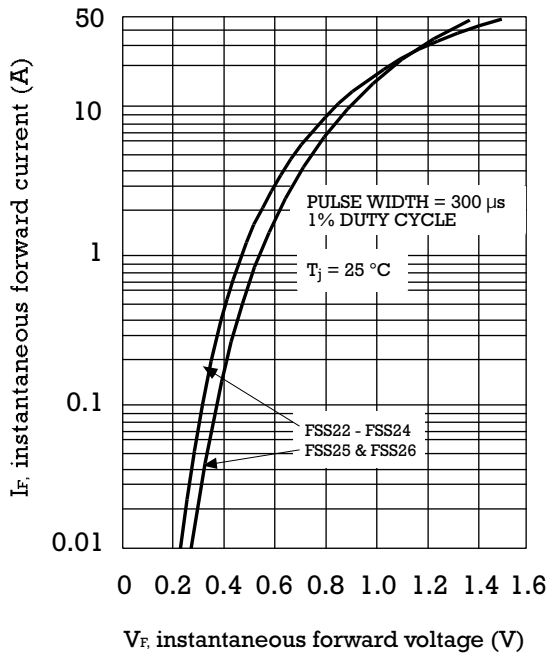
MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



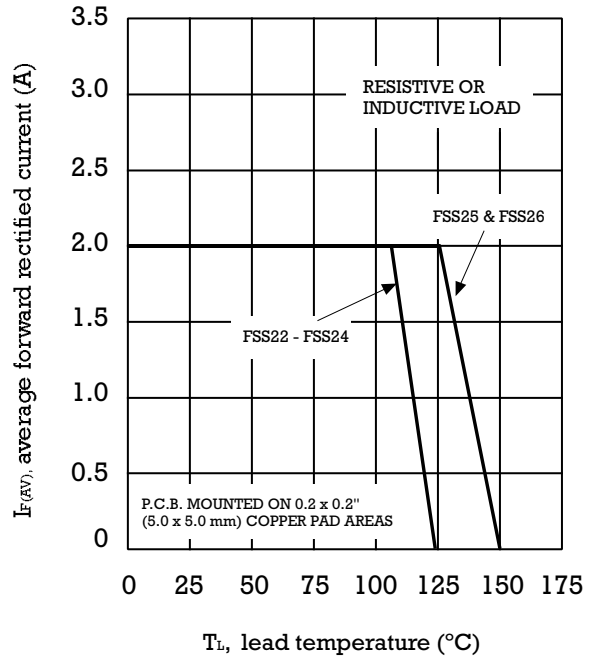
TYPICAL JUNCTION CAPACITANCE



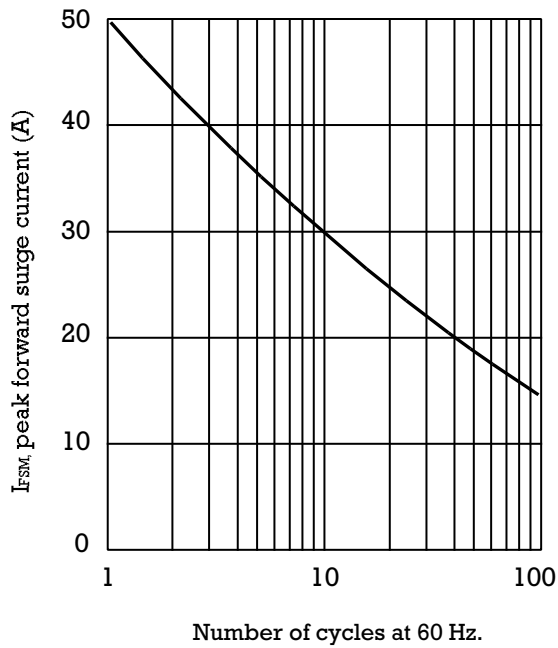
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

