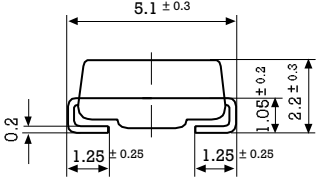
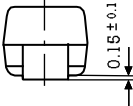
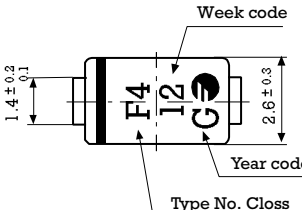
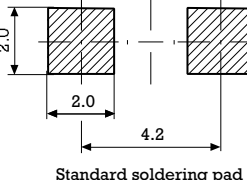


## 1 Amp. Surface Mounted Schottky Barrier Rectifier

| Dimensions in mm.                                                                                                                                                                                                                                                                                                                         | CASE:<br>SMA/DO-214AC<br>(Plastic) | Voltage<br>20 V to 60 V                                                                                                                                                                                                                                                                                                                                                                                                  | Current<br>1.0 A |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
|     |                                    | <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 94 V0</li> <li>• Low profile package</li> <li>• Easy pick and place</li> </ul> |                  |

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

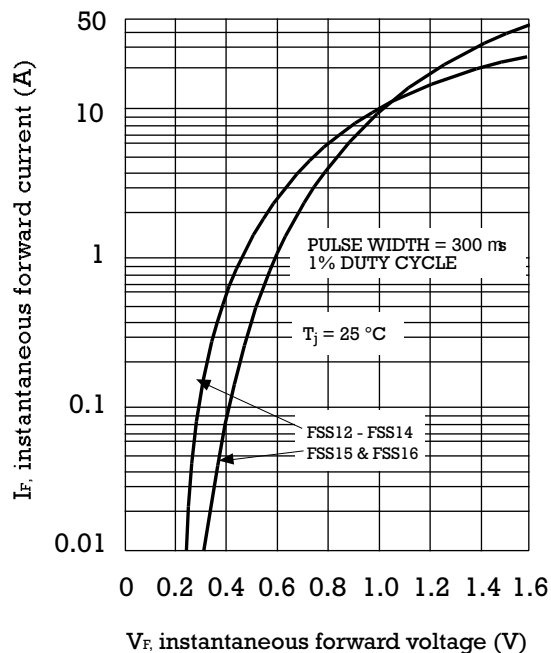
|                     |                                                      | FSS12            | FSS13 | FSS14 | FSS15            | FSS16 |
|---------------------|------------------------------------------------------|------------------|-------|-------|------------------|-------|
| Marking Code        |                                                      | A1               | A2    | A3    | A4               | A5    |
| V <sub>RRM</sub>    | Peak recurrent reverse voltage (V)                   | 20               | 30    | 40    | 50               | 60    |
| V <sub>RMS</sub>    | Maximum RMS voltage (V)                              | 14               | 21    | 28    | 35               | 42    |
| V <sub>DC</sub>     | Maximum DC blocking voltage (V)                      | 20               | 30    | 40    | 50               | 60    |
| I <sub>F (AV)</sub> | Maximum average Forward current.                     | 1 A              |       |       |                  |       |
| I <sub>FSM</sub>    | 8.3 ms. peak forward surge current<br>(Jedec Method) | 40 A             |       |       |                  |       |
| T <sub>j</sub>      | Operating temperature range                          | − 65 to + 125 °C |       |       | − 65 to + 150 °C |       |
| T <sub>stg</sub>    | Storage temperature range                            | − 65 to + 150 °C |       |       |                  |       |

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

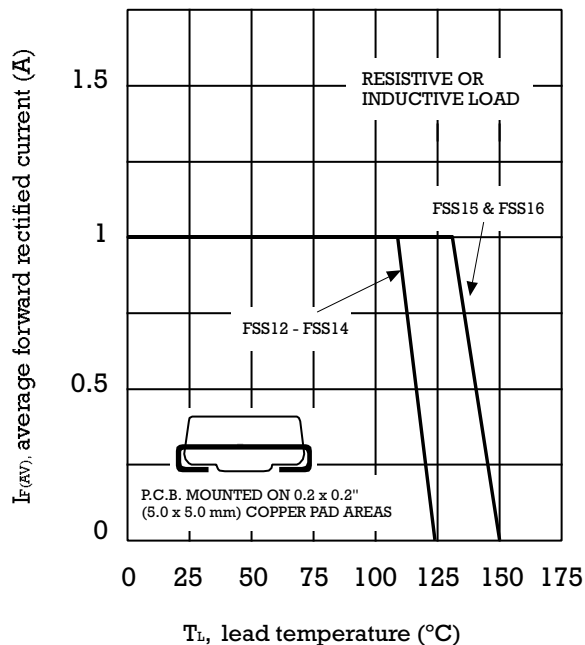
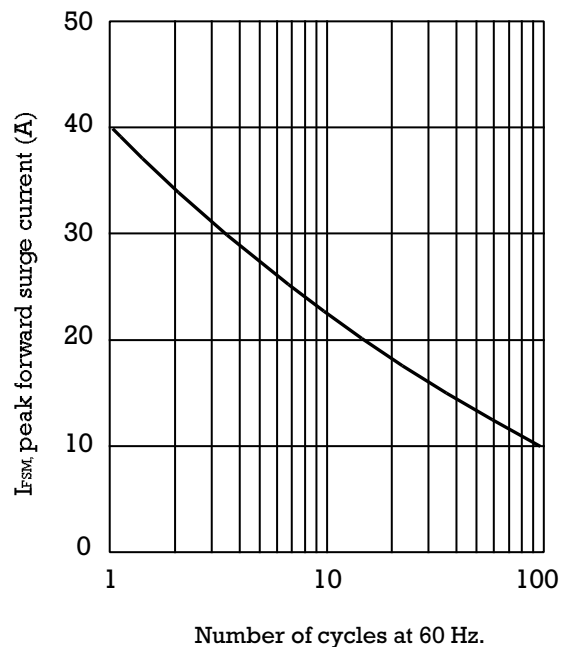
|                            |                                                                                                  |                    |        |
|----------------------------|--------------------------------------------------------------------------------------------------|--------------------|--------|
| $V_F$                      | Max. forward voltage drop at $I_F = 1.0\text{ A}$                                                | 0.55 V             | 0.75 V |
| $I_R$                      | Max. Instantaneous reverse current at $V_{RRM}$<br>$T_a = 25\text{ °C}$<br>$T_a = 100\text{ °C}$ | 0.5 mA             |        |
|                            |                                                                                                  | 10 mA              | 5 mA   |
| $R_{thj-a}$<br>$R_{thj-l}$ | Typical Thermal Resistance                                                                       | 88 °C/W<br>28 °C/W |        |

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

TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE


MAXIMUM NON-REPETITIVE  
PEAK FORWARD SURGE CURRENT


TYPICAL JUNCTION CAPACITANCE

