

## 1 Amp. Surface Mounted Schottky Barrier Rectifier

<p><b>Dimensions in mm.</b></p> <p><b>CASE:</b> SMA/DO-214AC (Plastic)</p> <p>Week code F4 12 G Year code Type No. Class</p> <p>Standard soldering pad</p>	<p><b>Voltage</b> 20 V to 60 V</p> <p><b>Current</b> 1.0 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 94 V-O</li> <li>• Low profile package</li> <li>• Easy pick and place</li> </ul>
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### Maximum Ratings, according to IEC publication No. 134

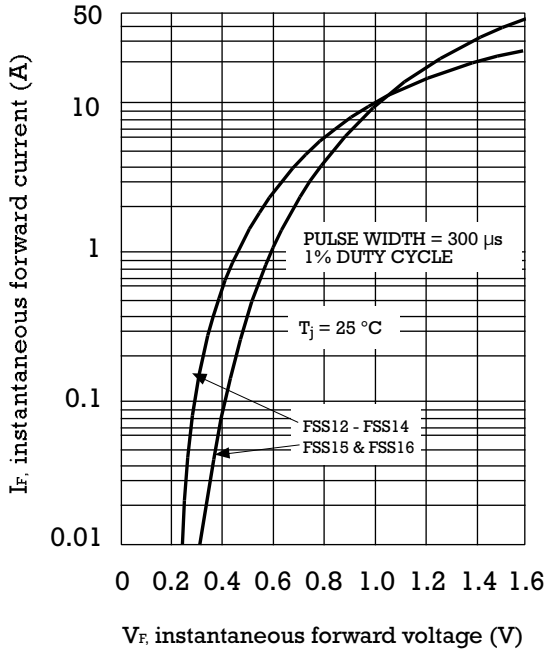
		FSS12	FSS13	FSS14	FSS15	FSS16
Marking Code		A1	A2	A3	A4	A5
$V_{RRM}$	Peak recurrent reverse voltage (V)	20	30	40	50	60
$V_{RMS}$	Maximum RMS voltage (V)	14	21	28	35	42
$V_{DC}$	Maximum DC blocking voltage (V)	20	30	40	50	60
$I_{F(AV)}$	Maximum average Forward current.	1 A				
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	40 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 $T_{amb} = 25\text{ °C}$

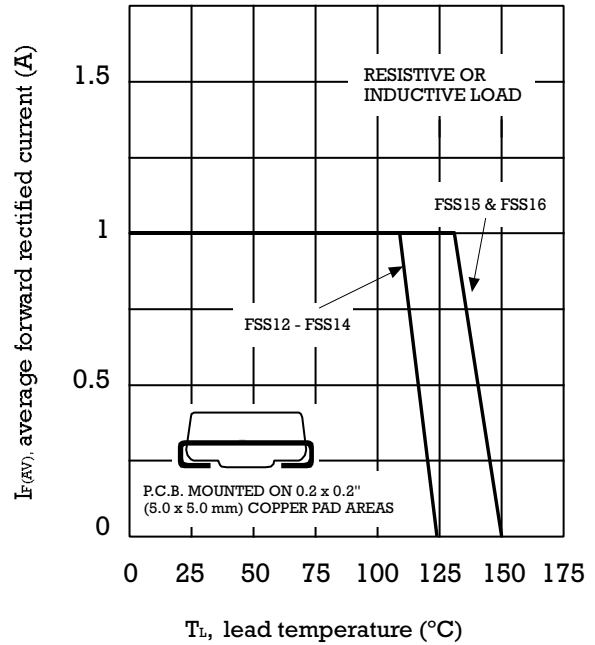
$V_F$	Max. forward voltage drop at $I_F = 1.0\text{ A}$	0.55 V	0.75 V
$I_R$	Max. Instantaneous reverse current at $V_{RRM}$ $T_a = 25\text{ °C}$ $T_a = 100\text{ °C}$	0.5 mA	
		10 mA	5 mA
$R_{thj-a}$ $R_{thj-l}$	Typical Thermal Resistance	88 °C/W 28 °C/W	

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

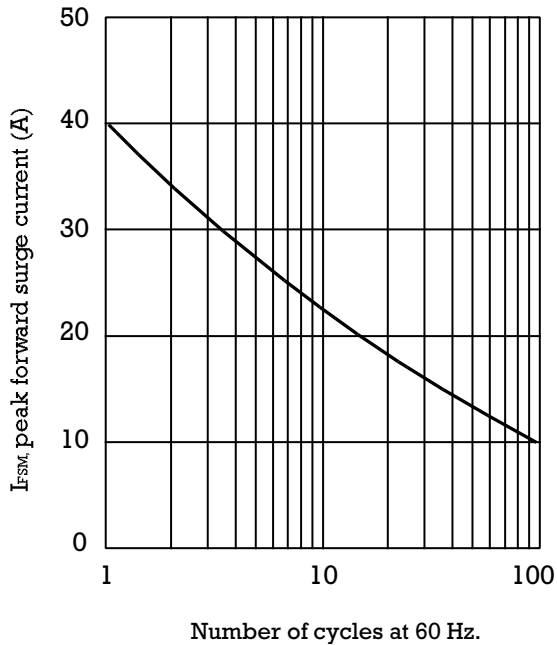
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

