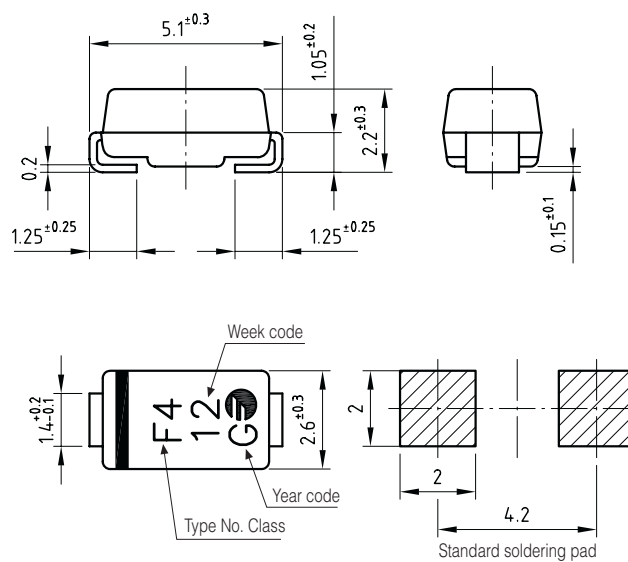



# 1 Amp. Surface Mounted Glass Passivated Ultrafast Efficient Rectifier

<p><b>Dimensions in mm.</b></p>  <p><b>CASE:</b> <b>SMA/DO-214AC</b></p>	<p><b>Voltage</b> 200 V</p>	<p><b>Current</b> 1.0 A</p>
		
	<ul style="list-style-type: none"> <li>• Glass passivated junction</li> <li>• High current capability</li> <li>• The plastic material carries U/L 94 V-0</li> <li>• Low profile package</li> <li>• Easy pick and place</li> <li>• High temperature soldering 260 °C 10 sec</li> </ul>	
	<p><b>MECHANICAL DATA</b></p> <p>Terminals: Solder plated, solderable per IEC 68-2-20. Standard Packaging: 4 mm. tape (EIA-RS-481). Weight: 0.064 g.</p>	

## Maximum Ratings and Electrical Characteristics at 25 °C

		FUES1DS
Marking Code		U9
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	200
$V_{RMS}$	Maximum RMS Voltage (V)	140
$V_{DC}$	Maximum DC Blocking voltage (V)	200
$I_{F(AV)}$	Forward current at $T_L = 75\text{ °C}$	1.0 A
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	30 A
$V_F$	Max. Instantaneous Forward Voltage Drop at 1.0 A at 0.6 A	0.920 V
		0.865 V
$I_R$	Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage	2 $\mu$ A
	$T_a = 100\text{ °C}$	100 $\mu$ A
	at 10V DC Blocking Voltage $T_a = 25\text{ °C}$	200 nA
	at 10V DC Blocking Voltage $T_a = 100\text{ °C}^*$	1 $\mu$ A
$T_{rr}$	Typical Reverse Recovery Time (0.5/1/0.25A)	25 ns
$C_j$	Typical Junction Capacitance (1MHz; -4V)	8 pF
$R_{th(j-i)}$	Typical Thermal Resistance	27 °C/W
$R_{th(j-a)}$	(5x5 mm <sup>2</sup> x 130 $\mu$ Copper Area)	75 °C/W
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 °C

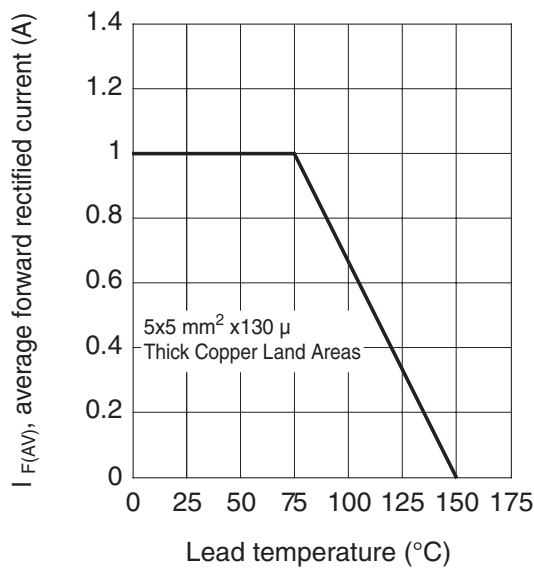
\* Each batch is tested and certified to meet an AQL = 0.1% for this parameter.

### Electrical Characteristics at $T_j = -40\text{ }^\circ\text{C}$ to $+150\text{ }^\circ\text{C}$

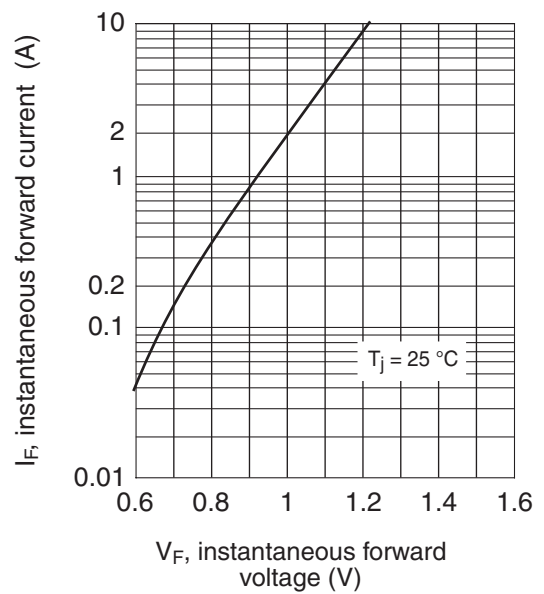
$V_F$	Max. forward voltage drop at $I_F = 1\text{ A}$	1.05 V
$I_R$	Maximum DC Reverse Current at rated DC Blocking Voltage	1500 $\mu\text{A}$

### Rating And Characteristic Curves

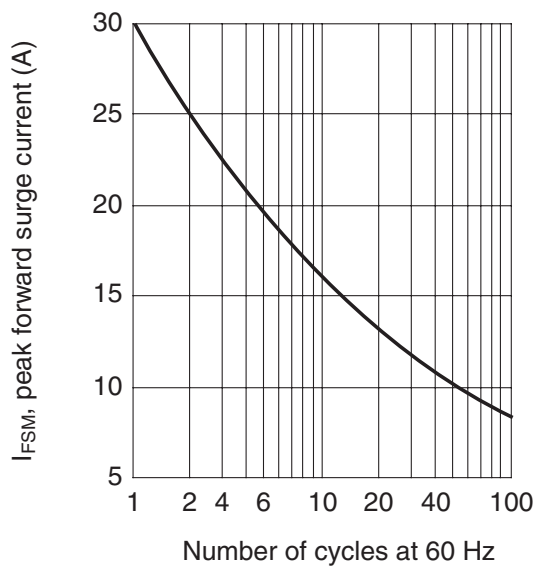
FORWARD CURRENT DERATING CURVE



TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

