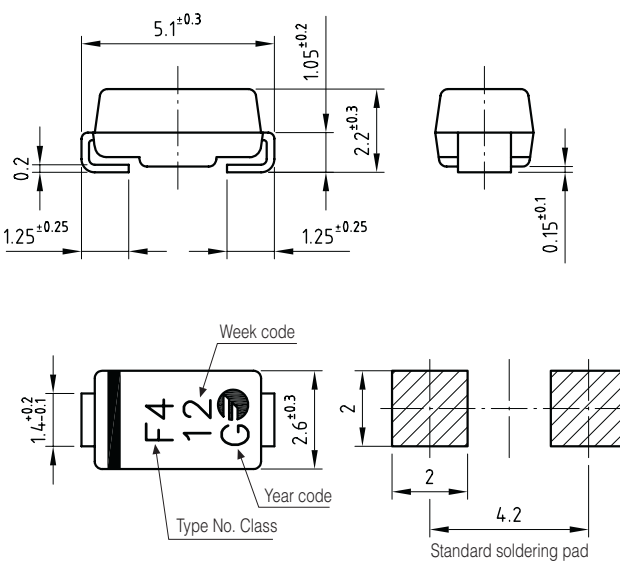





## 1.0 Amp. Surface Mounted Glass Passivated Ultrafast Efficient Rectifier

<p><b>Dimensions in mm.</b></p>  <p><b>CASE:</b> <b>SMA/DO-214AC</b></p> <p>Week code F4 12 C Year code Type No. Class</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"><b>Voltage</b> 50 to 200 V</td> <td style="width: 50%; text-align: center;"><b>Current</b> 1.0 A</td> </tr> <tr> <td colspan="2" style="text-align: center;">  </td> </tr> <tr> <td colspan="2"> <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> </td> </tr> <tr> <td colspan="2"> <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> </td> </tr> </table>	<b>Voltage</b> 50 to 200 V	<b>Current</b> 1.0 A			<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>	
<b>Voltage</b> 50 to 200 V	<b>Current</b> 1.0 A								
									
<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

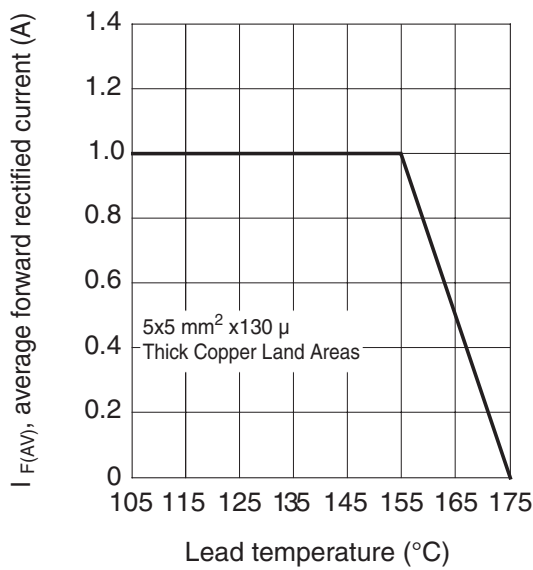
		FUES1A	FUES1B	FUES1D
<b>Marking Code</b>		UA	UB	UD
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200
$V_{RMS}$	Maximum RMS Voltage (V)	35	70	140
$V_{DC}$	Maximum DC Blocking voltage (V)	50	100	200
$I_{F(AV)}$	Forward current at $T_L = 75\text{ °C}$	1.0 A		
$I_{FSM}$	8.3 ms. peak forward 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 $T_a = 125\text{ °C}$	1 $\mu$ A 25 $\mu$ 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 + 175 °C		

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

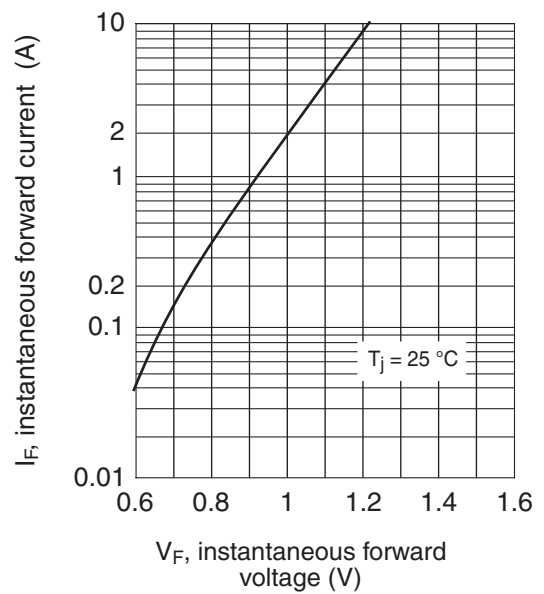
$V_F$	Max. forward voltage drop at $I_F = 1\text{ A}$	1.05 V
$I_R$	Maximum DC Reverse Current at rated DC Blocking Voltage	1500 $\mu\text{A}$

### Rating And Characteristic Curves

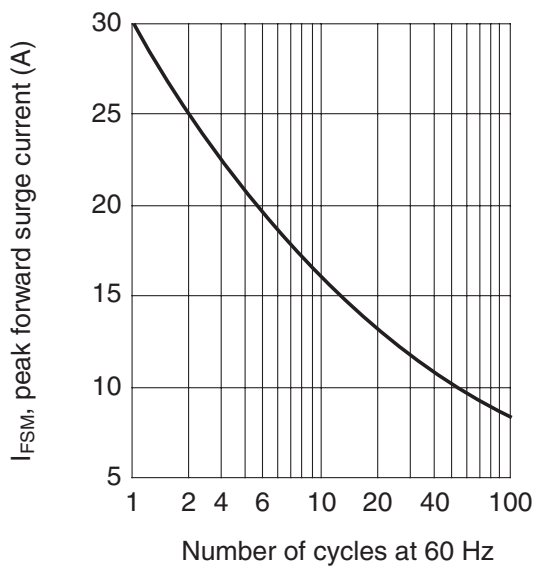
FORWARD CURRENT DERATING CURVE



TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

