

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

<p><b>Dimensions in mm.</b></p> <p><b>CASE: SMA/DO-214AC</b></p>	<p><b>Voltage</b> 50 to 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

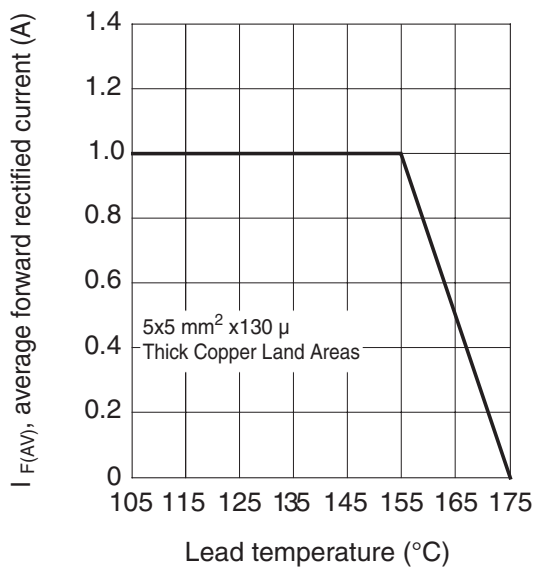
		FUES1A	FUES1B	FUES1D
Marking Code		UA	UB	UD
V <sub>RRM</sub>	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200
V <sub>RMS</sub>	Maximum RMS Voltage (V)	35	70	140
V <sub>DC</sub>	Maximum DC Blocking voltage (V)	50	100	200
I <sub>F(AV)</sub>	Forward current at T <sub>L</sub> = 75 °C	1.0 A		
I <sub>FSM</sub>	8.3 ms. peak forward surge current (Jedec Method)	30 A		
V <sub>F</sub>	Max. Instantaneous Forward Voltage Drop at 1.0 A at 0.6 A	0.920 V 0.865 V		
I <sub>R</sub>	Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 125 °C	1 µA 25 µA		
T <sub>rr</sub>	Typical Reverse Recovery Time (0.5/1/0.25A)	25 ns		
C <sub>j</sub>	Typical Junction Capacitance (1MHz; -4V)	8 pF		
R <sub>th(j-i)</sub>	Typical Thermal Resistance	27 °C/W		
R <sub>th(j-a)</sub>	(5x5 mm <sup>2</sup> x 130 µ Copper Area)	75 °C/W		
T <sub>j</sub> - T <sub>stg</sub>	Operating Junction and Storage Temperature Range	-55 to + 175 °C		

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

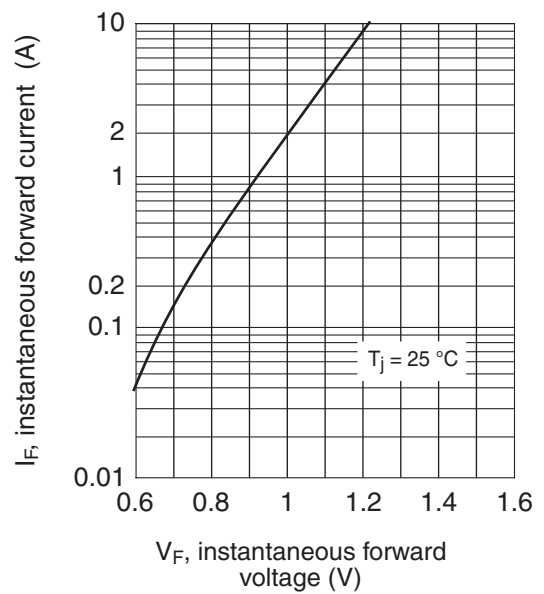
$V_F$	Max. forward voltage drop at $I_F = 1\text{ A}$	1.05 V
$I_R$	Maximum DC Reverse Current at rated DC Blocking Voltage	1500 $\mu\text{A}$

### Rating And Characteristic Curves

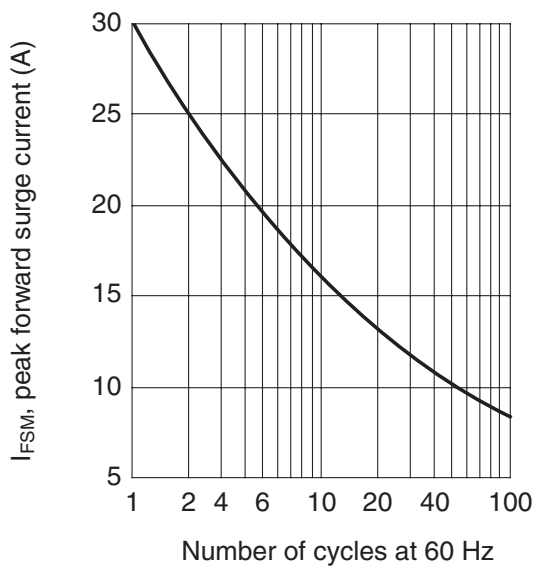
FORWARD CURRENT DERATING CURVE



TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

