

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

<p><b>Dimensions in mm.</b></p> <p>                 CASE:  <b>SMA/DO-214AC</b> </p>	<p> <b>Voltage</b>                  50 to 200 V             </p> <p> <b>Current</b>                  1.0 A             </p>
<p>                 • Glass passivated junction                  • High current capability                  • The plastic material carries U/L 94 V-0                  • Low profile package                  • Easy pick and place                  • High temperature soldering 260 °C 10 sec             </p>	<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

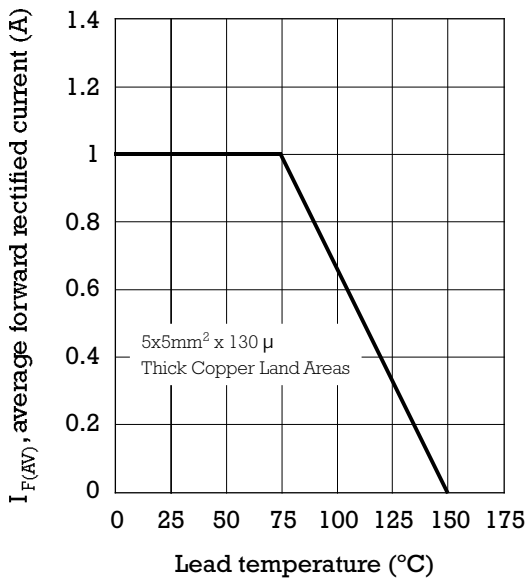
		FUES1A	FUES1B	FUES1D
Marking Code		UA	UB	UD
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200
$V_{RMS}$	Maximum RMS Voltage (V)	35	70	140
$V_{DC}$	Maximum DC Blocking Voltage (V)	50	100	200
$I_{F(AV)}$	Forward current at $T_L = 75\text{ °C}$	1.0 A		
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	30 A		
$V_F$	Max. Instantaneous Forward Voltage Drop at 1.0A at 0.6A	0.920 V 0.865 V		
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ °C}$ $T_a = 100\text{ °C}$	2 $\mu$ A 100 $\mu$ A		
$T_{rr}$	Maximum Reverse Recovery Time (0.5/1/0.25A)	25 ns		
$C_j$	Typical Junction Capacitance (1MHz; -4V)	8 pF		
$R_{th(j-l)}$ $R_{th(j-a)}$	Typical Thermal Resistance (5x5 mm <sup>2</sup> x 130 $\mu$ Copper Area)	27 °C/W 75 °C/W		
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 °C		

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

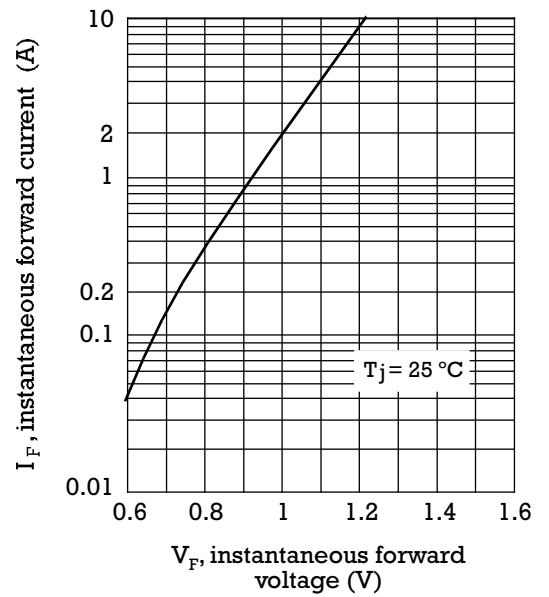
$V_F$	Max. forward voltage drop at $I_F = 1\text{ A}$	1.05 V
$I_R$	Maximum DC Reverse Current at rated DC Blocking Voltage	1500 $\mu\text{A}$

Rating And Characteristic Curves

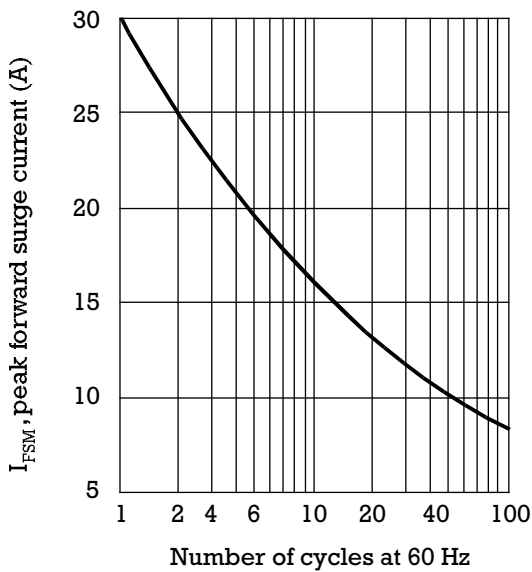
FORWARD CURRENT DERATING CURVE



TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

