

1 Amp. Surface Mounted Glass Passivated Ultrafast Efficient Rectifier

Dimensions in mm. CASE: SMA/DO-214AC	Voltage 50 to 200 V Current 1.0 A HYPERECTIFIER® • 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 MECHANICAL DATA Terminals: Solder plated, solderable per IEC 68-2-20. Standard Packaging: 4 mm. tape (EIA-RS-481). Weight: 0.064 g.
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Maximum Ratings and Electrical Characteristics at 25 °C

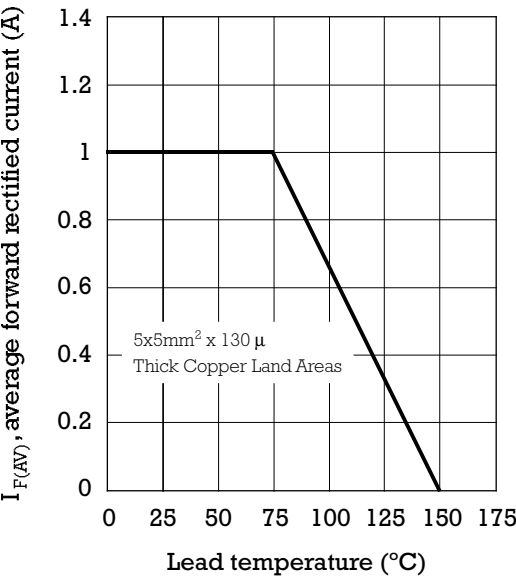
		FUES1A	FUES1B	FUES1D
Marking Code		UA	UB	UD
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200
V_{RMS}	Maximum RMS Voltage (V)	35	70	140
V_{DC}	Maximum DC Blocking Voltage (V)	50	100	200
$I_{F(AV)}$	Forward current at $T_L = 75\text{ °C}$	1.0 A		
I_{FSM}	8.3 ms. peak forward surge current (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 $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 100\text{ °C}$	2 μ A 100 μ 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 ² x 130 μ 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 $+150\text{ }^{\circ}\text{C}$

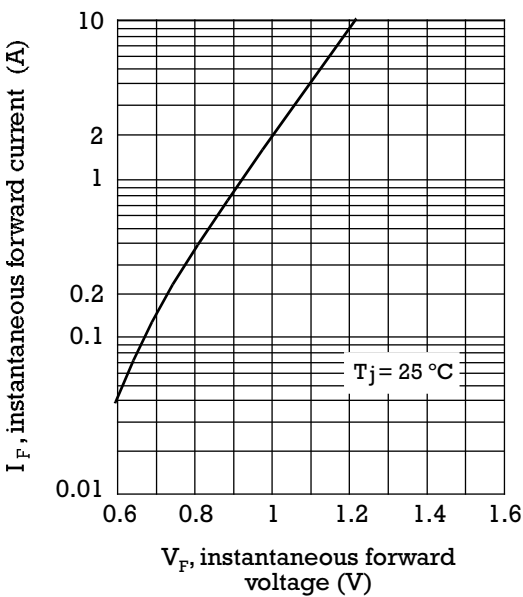
V_F	Max. forward voltage drop at $I_F = 1\text{ A}$	1.05 V
I_R	Maximum DC Reverse Current at rated DC Blocking Voltage	1500 μA

Rating And Characteristic Curves

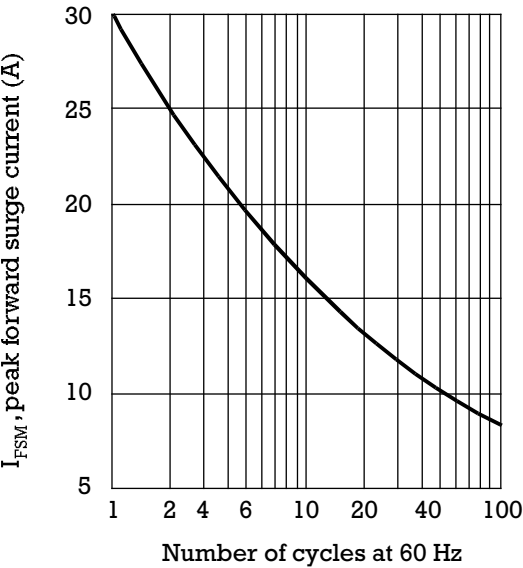
FORWARD CURRENT DERATING CURVE



TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION
CAPACITANCE

