

3 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

Dimensions in mm.

CASE:
SMC/DO-214AB

Voltage
50 to 1000 V

Current
3.0 A

HYPERECTIFIER®

Top view dimensions:
 Total width: 7.8 ± 0.3
 Lead spacing: 1.25 ± 0.25
 Lead thickness: 0.2
 Body width: 1.05 ± 0.2
 Body height: 2.2 ± 0.3

Side view dimension:
 Lead thickness: 0.15 ± 0.1

Front view dimensions:
 Body height: 3 ± 0.2
 Body width: 5.9 ± 0.3

Marking:
 UAB (Type No.)
 1/2 (Circuit symbol)
 H (Polarity)
 Week code
 Year code

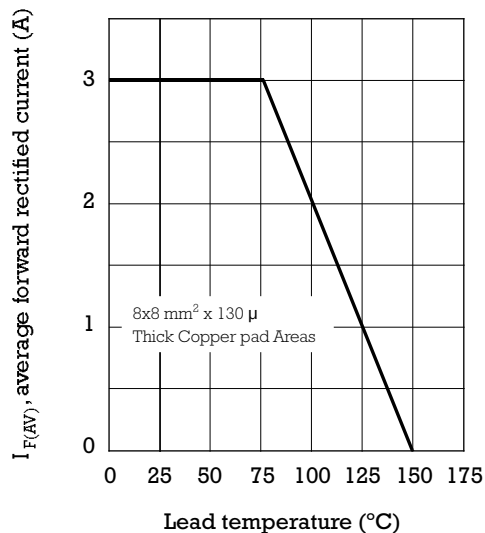
Standard soldering pad dimensions:
 Pad height: 3.8
 Pad width: 2.8
 Distance between pads: 7.2

Maximum Ratings and Electrical Characteristics at 25 °C

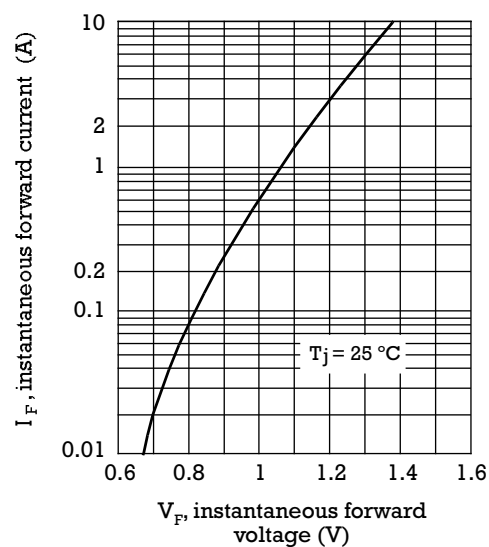
		FRS3A	FRS3B	FRS3D	FRS3G	FRS3J	FRS3K	FRS3M
Marking Code		J1	J2	J3	J4	J5	J6	J7
V_{RRM}	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000
$I_{F(AV)}$	Forward current at $T_L = 75\text{ }^{\circ}\text{C}$	3 A						
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	100 A						
V_F	Maximum Instantaneous Forward Voltage at 3.0 A	1.3 V						
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ }^{\circ}\text{C}$ $T_a = 125\text{ }^{\circ}\text{C}$	10 μA 250 μA						
t_{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	150 ns				250 ns	300 ns	
C_j	Typical Junction Capacitance (1MHz; -4V)	60 pF						
$R_{th(j-l)}$ $R_{th(j-a)}$	Typical Thermal Resistance (5x5 mm ² x 130 μ Copper Area)	15 $^{\circ}\text{C}/\text{W}$ 50 $^{\circ}\text{C}/\text{W}$						
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 $^{\circ}\text{C}$						

Rating And Characteristic Curves

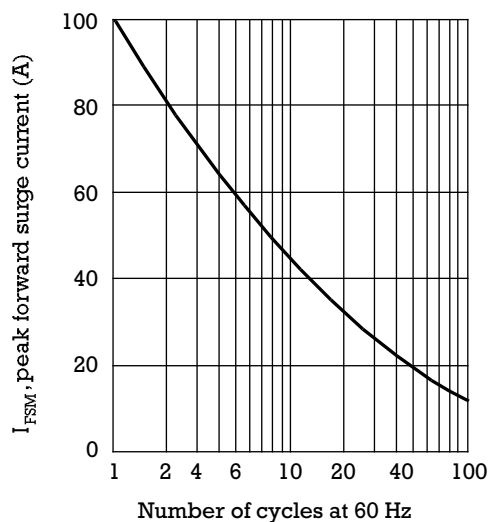
FORWARD CURRENT DERATING CURVE



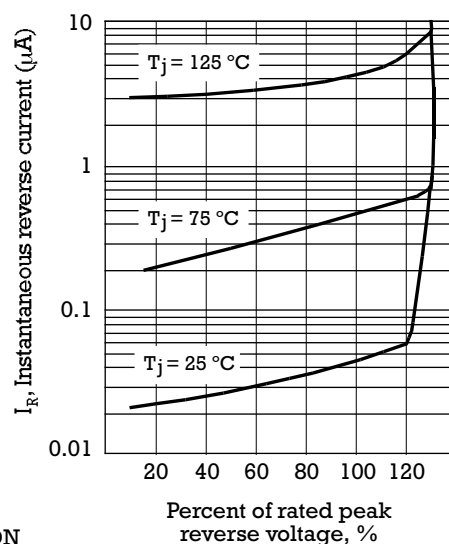
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION
CAPACITANCE

