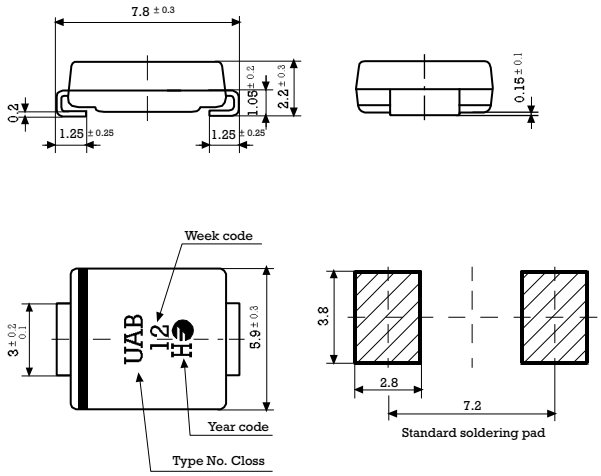
3 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

Dimensions in mm.

CASE:
SMC/DO-214AB



Voltage
50 to 1000 V

Current
3.0 A

HYPERECTIFIER®

- **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

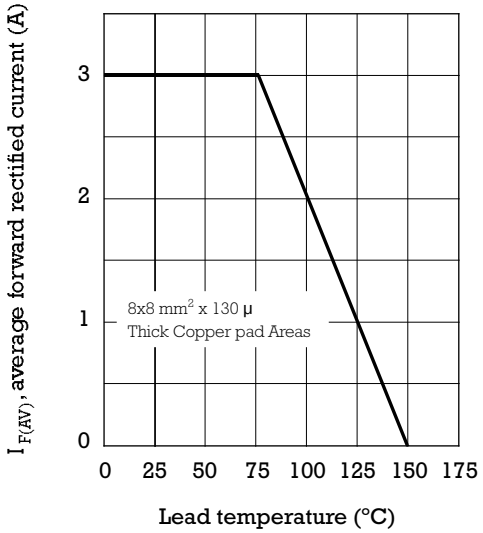
Terminals: Solder plated, solderable per IEC 68-2-20.
Standard Packaging: 8 mm. tape (EIA-RS-481).
Weight: 1.12 g.

Maximum Ratings and Electrical Characteristics at 25 °C

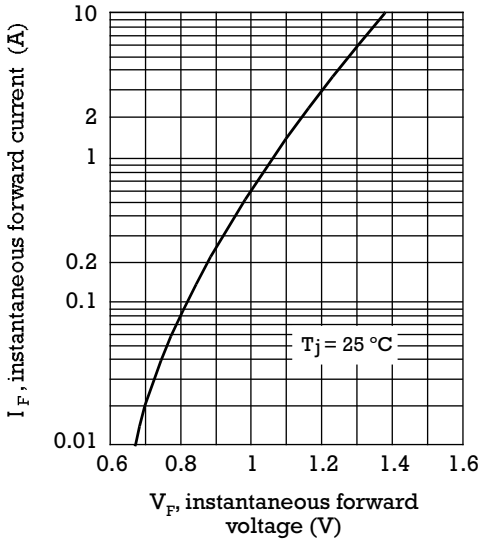
		FRS3A	FRS3B	FRS3D	FRS3G	FRS3J	FRS3K	FRS3M
Marking Code		J1	J2	J3	J4	J5	J6	J7
V_{RRM}	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000
$I_{F(AV)}$	Forward current at T_L = 75 °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 Ta = 25 °C at Rated DC Blocking Voltage Ta = 125 °C	10 µA 250µ A						
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 mm² x 130 µ Copper Area)	15 °C/W 50 °C/W						
T_j - T_{stg}	Operating Junction and Storage Temperature Range	-55 to + 150 °C						

Rating And Characteristic Curves

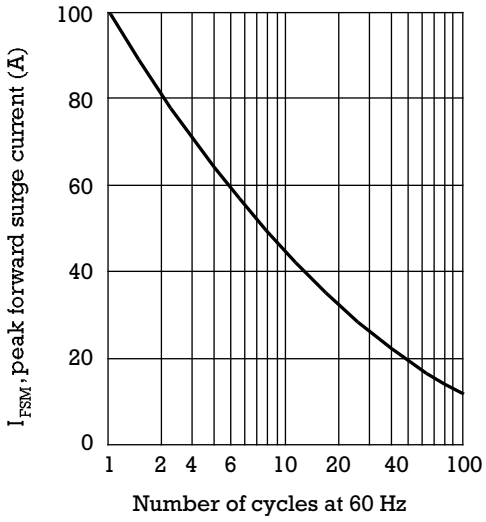
FORWARD CURRENT DERATING CURVE



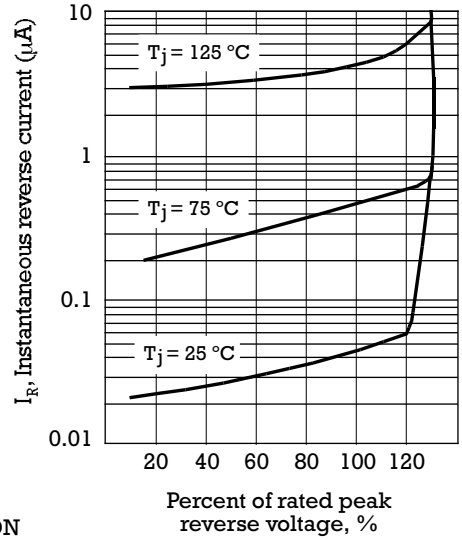
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE