



FRS3A FRS3M

3 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

<p>Dimensions in mm.</p> <p>7.8 ± 0.3 1.25 ± 0.25 1.05 ± 0.2 2.2 ± 0.3 0.15 ± 0.1 3 ± 0.1 5.9 ± 0.3 3.8 2.8 7.2 Standard soldering pad</p> <p>Week code UAB 12 Year code Type No. Class</p>	<p>CASE: SMC/DO-214AB</p>	<p>Voltage 50 to 1000 V</p> <p>Current 3.0 A</p> <p>HYPERRECTIFIER®</p>
<ul style="list-style-type: none"> • 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>MECHANICAL DATA</p> <p>Terminals: Solder plated, solderable per IEC 68-2-20. Standard Packaging: 8 mm. tape (EIA-RS-481). Weight: 1.12 g.</p>		

Maximum Ratings and Electrical Characteristics at 25 °C

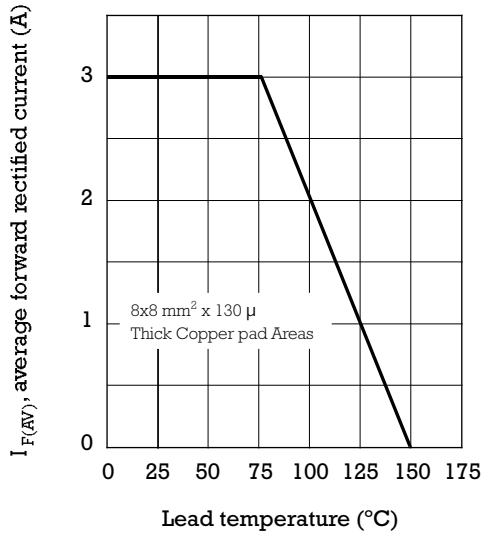
		FRS3A	FRS3B	FRS3D	FRS3G	FRS3J	FRS3K	FRS3M
Marking Code		J1	J2	J3	J4	J5	J6	J7
V _{RRM}	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000
V _{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	700
V _{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000
I _{F(AV)}	Forward current at 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 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 °C/W 50 °C/W						
T _j - T _{stg}	Operating Junction and Storage Temperature Range	-55 to + 150 °C						



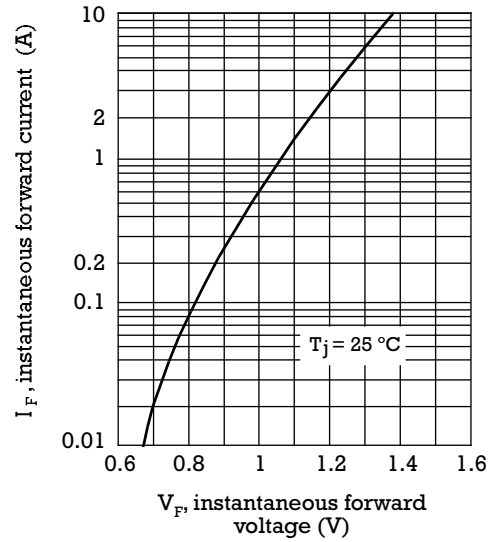


Rating And Characteristic Curves

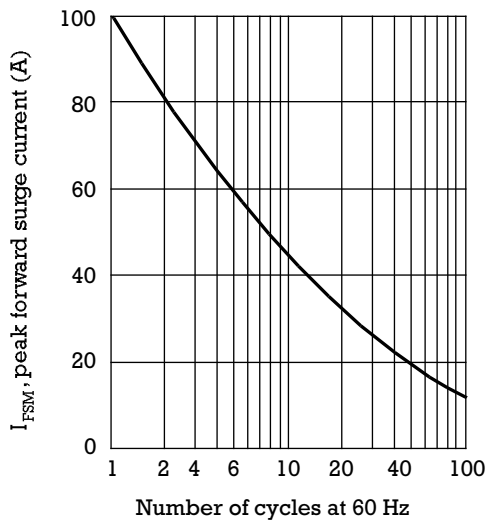
FORWARD CURRENT DERATING CURVE



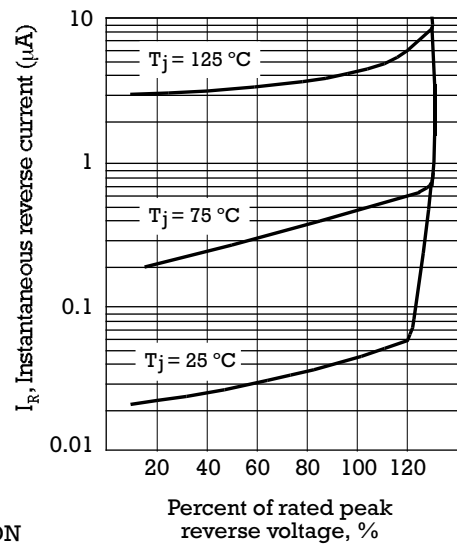
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE

