

### 3 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

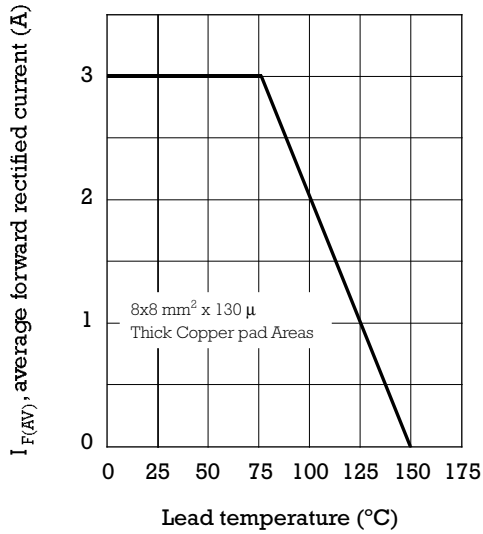
<p>Dimensions in mm.</p>	<p>CASE: SMC/DO-214AB</p>	<p>Voltage 50 to 1000 V</p> <p>Current 3.0 A</p>
		<ul style="list-style-type: none"> <li>• Glass passivated junction</li> <li>• High current capability</li> <li>• The plastic material carries U/L 94 V-0</li> <li>• Low profile package</li> <li>• Easy pick and place</li> <li>• High temperature soldering 260 °C 10 sec</li> </ul>
		<p><b>MECHANICAL DATA</b></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

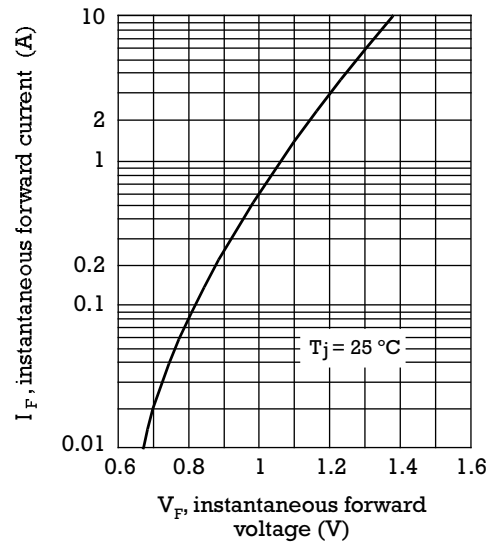
		FRS3A	FRS3B	FRS3D	FRS3G	FRS3J	FRS3K	FRS3M	
Marking Code		J1	J2	J3	J4	J5	J6	J7	
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	
$V_{RMS}$	Maximum RMS Voltage	35	70	140	280	420	560	700	
$V_{DC}$	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	
$I_{F(AV)}$	Forward current at $T_L = 75\text{ °C}$	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	$T_a = 25\text{ °C}$			$T_a = 125\text{ °C}$				
		10 $\mu$ A				250 $\mu$ 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 mm <sup>2</sup> x 130 $\mu$ 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

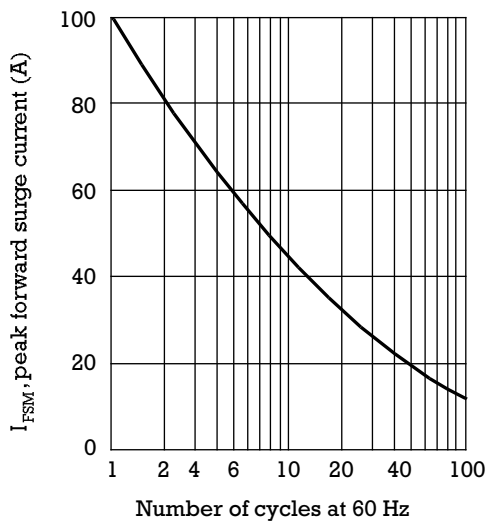
FORWARD CURRENT DERATING CURVE



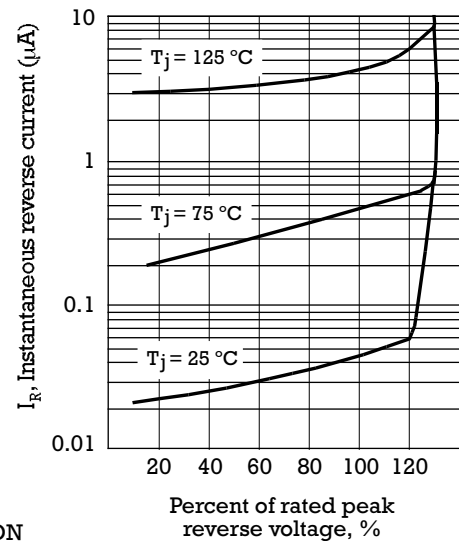
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE

