

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

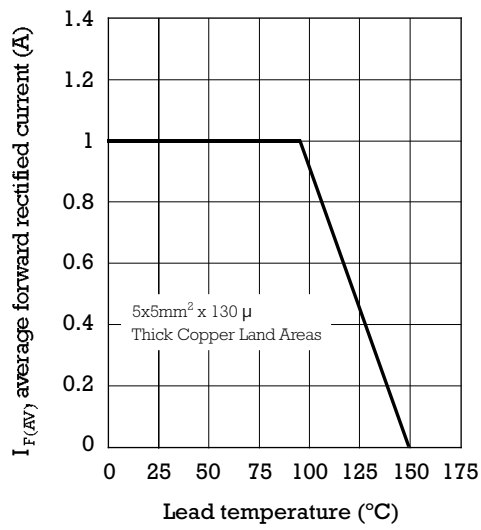
<p>Dimensions in mm.</p> <p>CASE: SMA/DO-214AC</p>	<p>Voltage 50 to 1000 V</p> <p>Current 1.0 A</p> <p><b>HYPERECTIFIER®</b></p> <ul style="list-style-type: none"> <li>• Glass passivated junction</li> <li>• High current capability</li> <li>• The plastic material carries U/L 94 V-0</li> <li>• Low profile package</li> <li>• Easy pick and place</li> <li>• High temperature soldering 260 °C 10 sec</li> </ul> <p><b>MECHANICAL DATA</b>                  Terminals: Solder plated, solderable per IEC 68-2-20.                  Standard Packaging: 4 mm. tape (EIA-RS-481).                  Weight: 0.064 g.</p>
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### Maximum Ratings and Electrical Characteristics at 25 °C

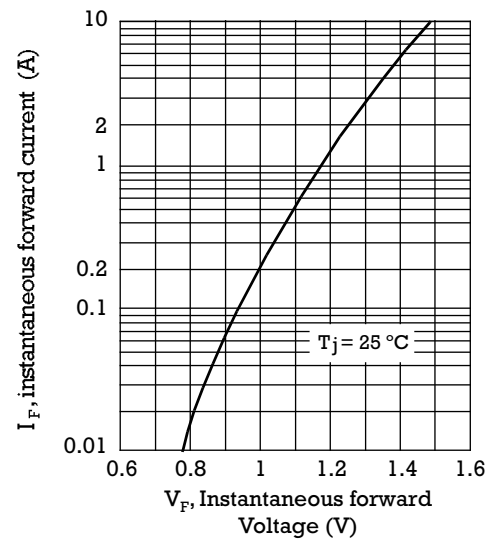
		FRS1A	FRS1B	FRS1D	FRS1G	FRS1J	FRS1K	FRS1M
Marking Code		F1	F2	F3	F4	F5	F6	F7
V <sub>RRM</sub>	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000
V <sub>RMS</sub>	Maximum RMS Voltage	35	70	140	280	420	560	700
V <sub>DC</sub>	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000
I <sub>F(AV)</sub>	Forward current at T <sub>L</sub> = 95 °C	1.0 A						
I <sub>FSM</sub>	8.3 ms. peak forward surge current (Jedec Method)	30 A						
V <sub>F</sub>	Maximum Instantaneous Forward Voltage at 1.0A	1.3 V						
I <sub>R</sub>	Maximum DC Reverse Current    Ta = 25 °C at Rated DC Blocking Voltage    Ta = 125 °C	5μ A 50μ A						
t <sub>rr</sub>	Maximum Reverse Recovery Time (0.5/1/0.25A)	150 ns				250 ns	500 ns	
C <sub>j</sub>	Typical Junction Capacitance (1MHz; -4V)	8 pF						
R <sub>th (j-l)</sub> R <sub>th (j-a)</sub>	Typical Thermal Resistance (5x5 mm² x 130 μ Copper Area)	27 °C/W 75 °C/W						
T <sub>j</sub> - T <sub>stg</sub>	Operating Junction and Storage Temperature Range	-55 to + 150 °C						

# Rating And Characteristic Curves

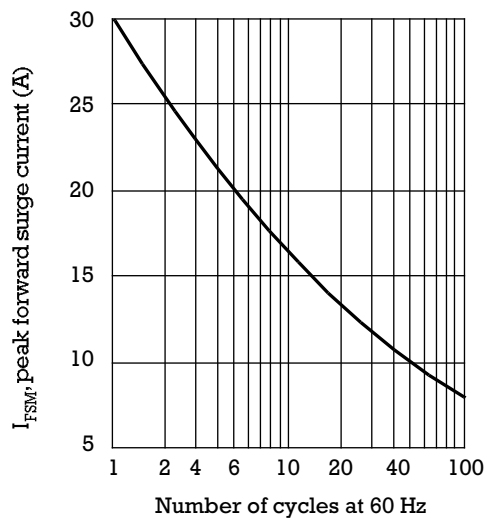
FORWARD CURRENT DERATING CURVE



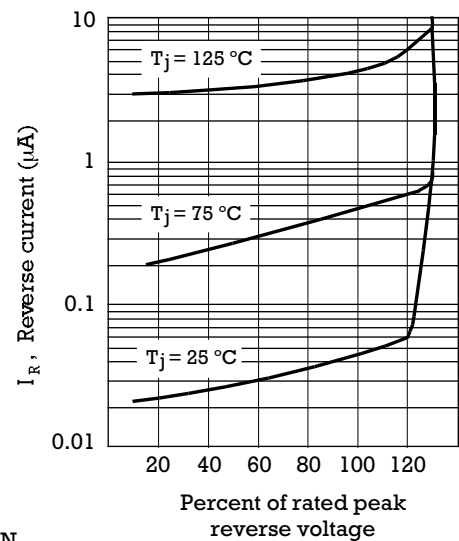
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION  
CAPACITANCE

