

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

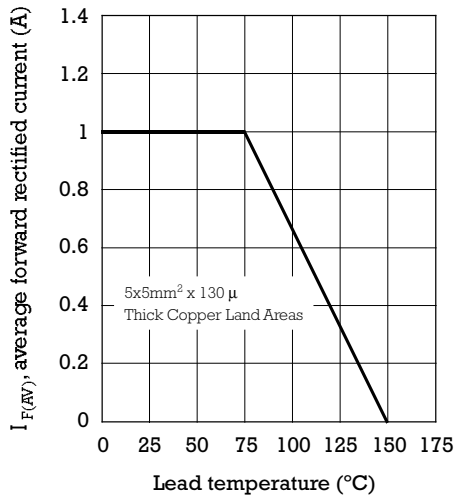
<p><b>Dimensions in mm.</b></p> <p><b>CASE:</b> <b>SMA/DO-214AC</b></p>	<p><b>Voltage</b> 50 to 600 V</p> <p><b>Current</b> 1.0 A</p> <p><b>HYPERECTIFIER®</b></p> <ul style="list-style-type: none"> <li>• Glass passivated junction</li> <li>• High current capability</li> <li>• The plastic material carries 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

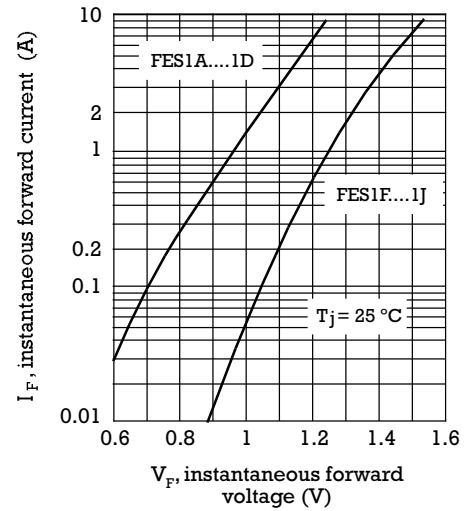
		FES1A	FES1B	FES1D	FES1F	FES1G	FES1J
Marking Code		U1	U2	U3	U4	U5	U6
V <sub>RRM</sub>	Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600
V <sub>RMS</sub>	Maximum RMS Voltage	35	70	140	210	280	420
V <sub>DC</sub>	Maximum DC Blocking Voltage	50	100	200	300	400	600
I <sub>F(AV)</sub>	Forward current at T <sub>L</sub> = 75 °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	0.95 V			1.25 V		
I <sub>R</sub>	Maximum DC Reverse Current    Ta = 25 °C at Rated DC Blocking Voltage    Ta = 100 °C	5 µA 100 µA					
T <sub>rr</sub>	Maximum Reverse Recovery Time    (0.5/1/0.25A)	50 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 mm <sup>2</sup> 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

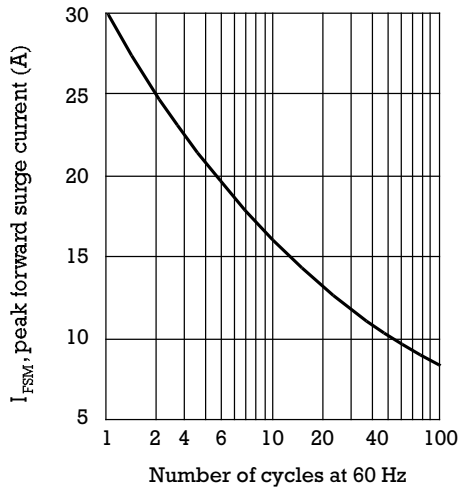
FORWARD CURRENT DERATING CURVE



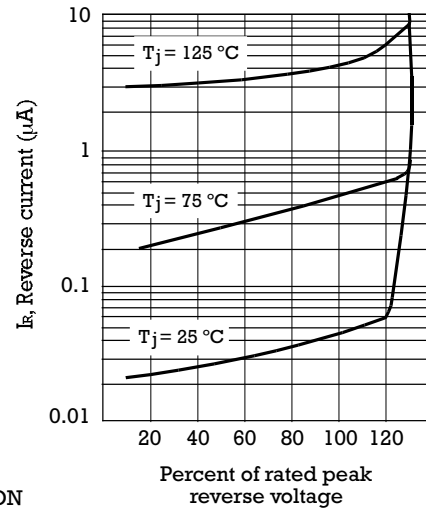
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION  
CAPACITANCE

