

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

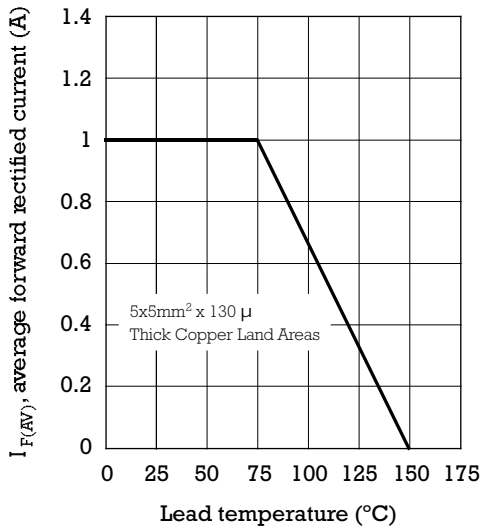
<p><b>Dimensions in mm.</b></p>	<p><b>CASE:</b> SMA/DO-214AC</p>	<p><b>Voltage</b> 50 to 600 V</p>	<p><b>Current</b> 1.0 A</p>
<ul style="list-style-type: none"> <li>Glass passivated junction</li> <li>High current capability</li> <li>The plastic material carries U/L 94 V-0</li> <li>Low profile package</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: 4 mm. tape (EIA-RS-481).                  Weight: 0.064 g.</p>			

### Maximum Ratings and Electrical Characteristics at 25 °C

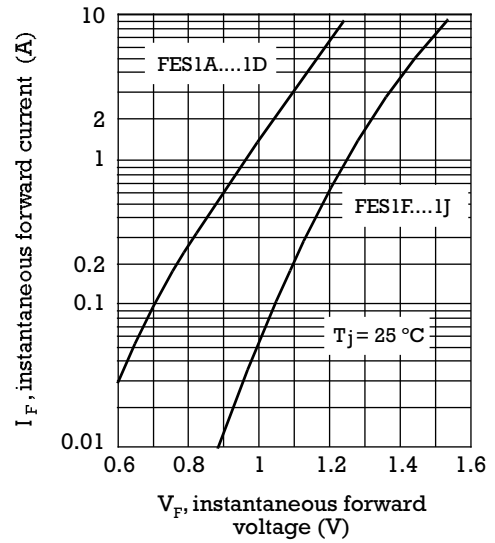
		FES1A	FES1B	FES1D	FES1F	FES1G	FES1J
Marking Code		<b>U1</b>	<b>U2</b>	<b>U3</b>	<b>U4</b>	<b>U5</b>	<b>U6</b>
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600
$V_{RMS}$	Maximum RMS Voltage	35	70	140	210	280	420
$V_{DC}$	Maximum DC Blocking Voltage	50	100	200	300	400	600
$I_{F(AV)}$	Forward current at $T_L = 75\text{ °C}$	1.0 A					
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	30 A					
$V_F$	Maximum Instantaneous Forward Voltage at 1.0A	0.95 V			1.25 V		
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ °C}$ $T_a = 100\text{ °C}$	5 $\mu$ A 100 $\mu$ A					
$T_{rr}$	Maximum Reverse Recovery Time (0.5/1/0.25A)	50 ns					
$C_j$	Typical Junction Capacitance (1MHz; -4V)	8 pF					
$R_{th(j-l)}$ $R_{th(j-a)}$	Typical Thermal Resistance (5x5 mm <sup>2</sup> x 130 $\mu$ Copper Area)	27 °C/W 75 °C/W					
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 °C					

### Rating And Characteristic Curves

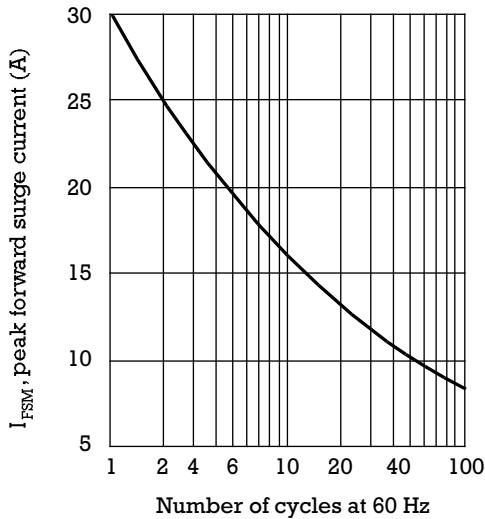
FORWARD CURRENT DERATING CURVE



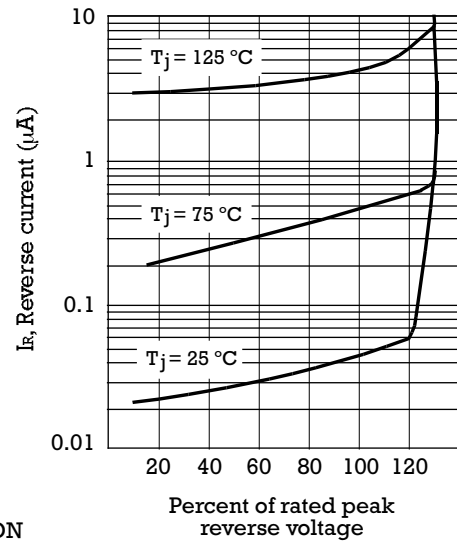
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE

