

## 1 Amp. Glass Passivated Fast Recovery Rectifier

<p><b>Dimensions in mm.</b></p> <p>DO-41 (Plastic)</p>	<p><b>Voltage</b> 50 to 1000 V.</p> <p><b>Current</b> 1.0 A. at 55 °C.</p> <p></p>
<p><b>Mounting instructions</b></p> <ol style="list-style-type: none"> <li>Min. distance from body to soldering point, 4 mm.</li> <li>Max. solder temperature, 350 °C.</li> <li>Max. soldering time, 3.5 sec.</li> <li>Do not bend lead at a point closer than 2 mm. to the body.</li> </ol>	<ul style="list-style-type: none"> <li>• Glass passivated junction</li> <li>• High current capability</li> <li>• The plastic material carries U/L recognition 94 V-0</li> <li>• Terminals: Axial Leads</li> <li>• Polarity: Color band denotes cathode</li> </ul>

### Maximum Ratings, according to IEC publication No. 134

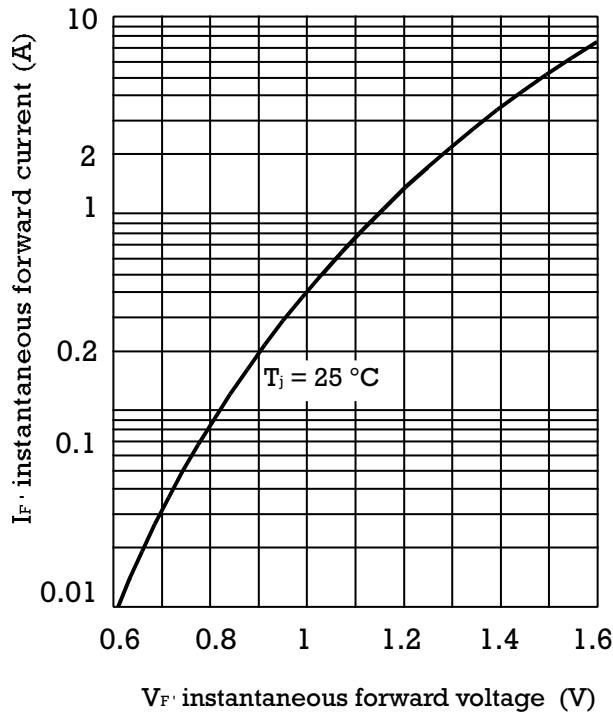
		RGP 10A	RGP 10B	RGP 10D	RGP 10G	RGP 10J	RGP 10K	RGP 10M	RGP 10MT
$V_{RRM}$	Peak recurrent reverse voltage (V)	50	100	200	400	600	800	1000	1000
$I_{F(AV)}$	Forward current at Tamb = 55 °C					1 A			
$I_{FRM}$	Recurrent peak forward current					10 A			
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)					30 A			
$t_{rr}$	Max. reverse recovery time from	$I_F = 0.5 \text{ A}$ $I_R = 1 \text{ A}$ $I_{RR} = 0.25 \text{ A}$			150 ns	250 ns	500 ns	300 ns	
$T_j$	Operating temperature range				– 65 to + 175 °C				
$T_{stg}$	Storage temperature range				– 65 to + 175 °C				
$E_{RSM}$	Maximum non repetitive peak reverse avalanche energy. $I_R = 0.5 \text{ A}$ ; $T_j = 25 \text{ °C}$				20 mJ				

### Electrical Characteristics at Tamb = 25 °C

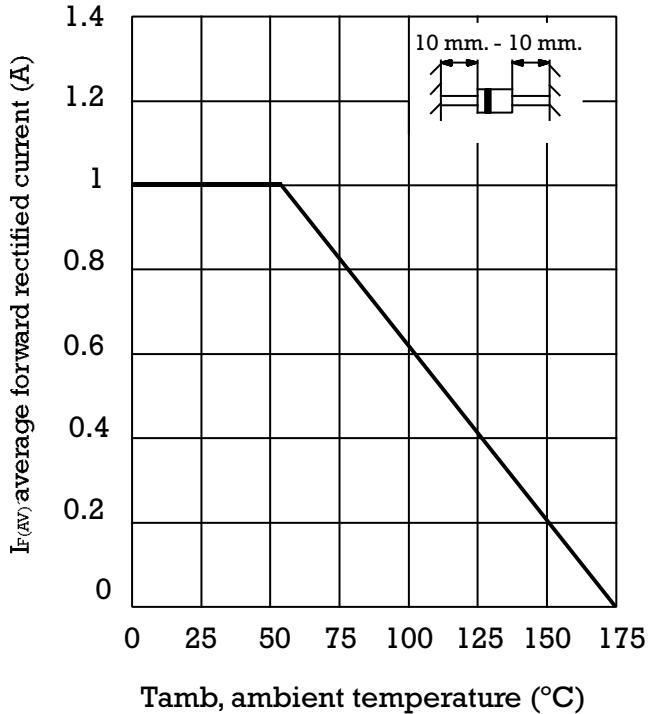
$V_F$	Max. forward voltage drop at $I_F = 1 \text{ A}$	1.3 V
$I_R$	Max. reverse current at $V_{RRM}$ at 25 °C at 150 °C	5 $\mu\text{A}$ 200 $\mu\text{A}$
$R_{thj-a}$	Thermal resistance (I = 10 mm.)	Max. Typ. 60 °C/W 45 °C/W

## Rating And Characteristic Curves

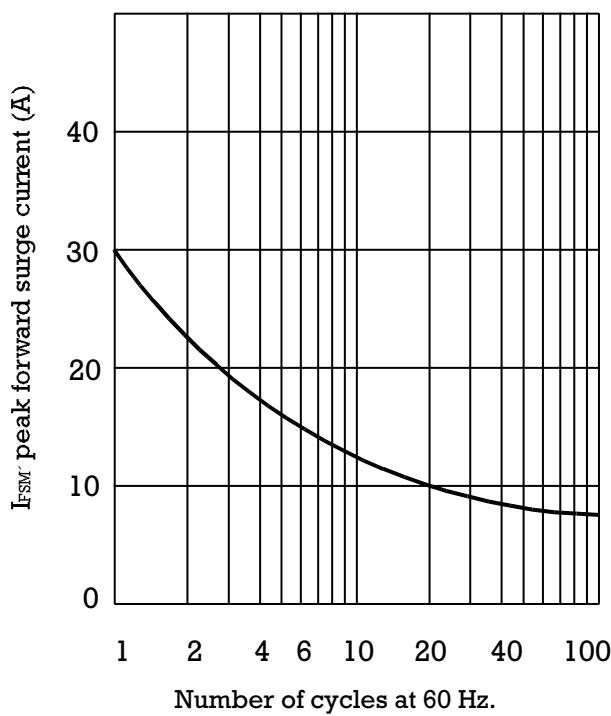
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

