

## 1 Amp. Glass Passivated Fast Recovery Rectifier

<p>Dimensions in mm.</p> <p style="text-align: right;">DO-41 (Plastic)</p> <p><b>Mounting instructions</b></p> <ol style="list-style-type: none"> <li>1. Min. distance from body to soldering point, 4 mm.</li> <li>2. Max. solder temperature, 350 °C.</li> <li>3. Max. soldering time, 3.5 sec.</li> <li>4. Do not bend lead at a point closer than 2 mm. to the body.</li> </ol>	<p>Voltage 50 to 1000 V.</p> <p>Current 1.0 A. at 55 °C.</p>
	<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

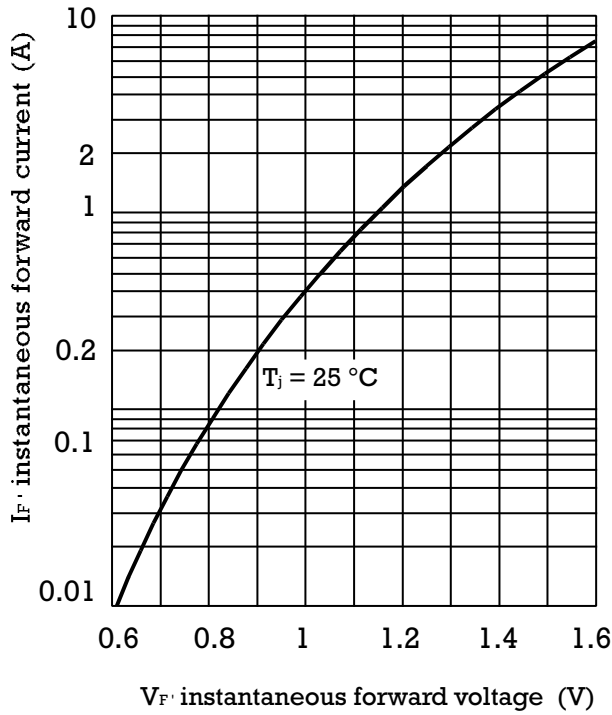
		RGP 10A	RGP 10B	RGP 10D	RGP 10G	RGP 10J	RGP 10K	RGP 10M	RGP 10MT
$V_{RRM}$	Peak recurrent reverse voltage (V)	50	100	200	400	600	800	1000	1000
$I_{F(AV)}$	Forward current at $T_{amb} = 55\text{ °C}$	1 A							
$I_{FRM}$	Recurrent peak forward current	10 A							
$I_{FSM}$	8.3 ms. peak forward surge current (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 $T_{amb} = 25\text{ °C}$

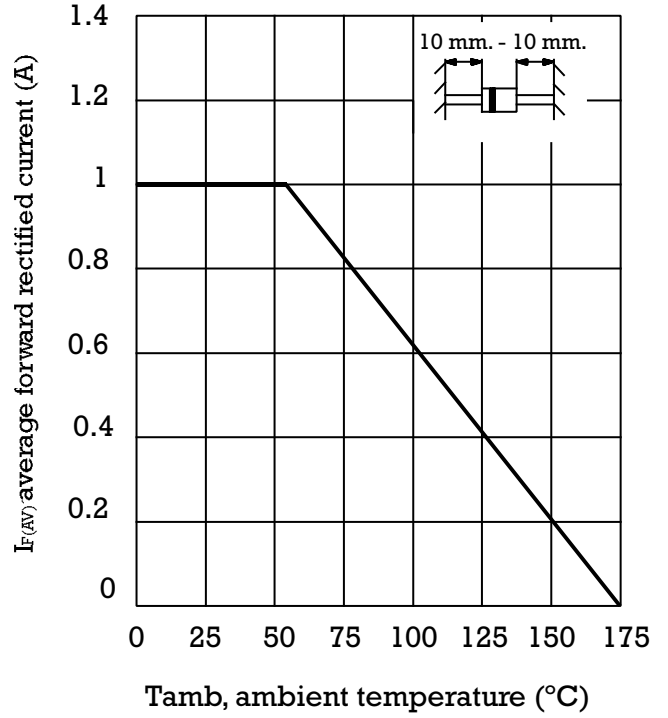
$V_F$	Max. forward voltage drop at $I_F = 1\text{ A}$	1.3 V
$I_R$	Max. reverse current at $V_{RRM}$ at 25 °C at 150 °C	5 $\mu\text{ A}$ 200 $\mu\text{ A}$
$R_{thj-a}$	Thermal resistance ( $l = 10\text{ mm.}$ ) Max. Typ.	60 °C/W 45 °C/W

## Rating And Characteristic Curves

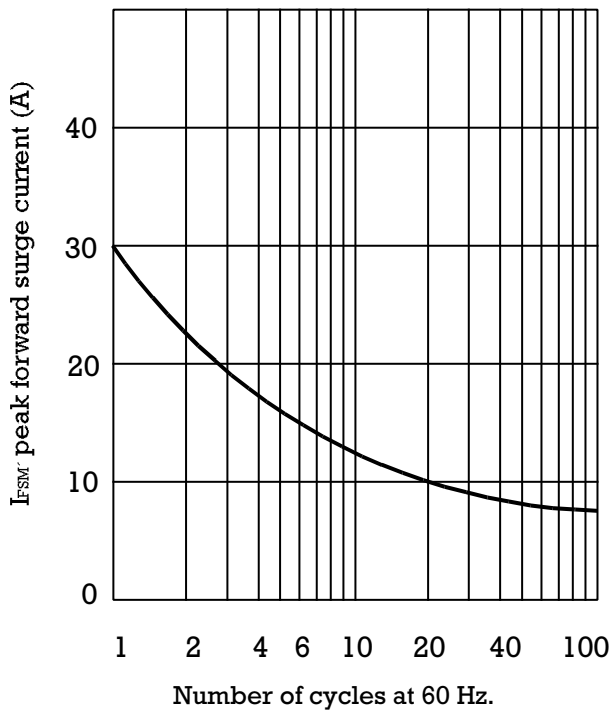
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

