

1 Amp. Glass Passivated Fast Recovery Rectifier

<p>Dimensions in mm.</p> <p>DO-41 (Plastic)</p> <p>Mounting instructions</p> <ol style="list-style-type: none"> 1. Min. distance from body to soldering point, 4 mm. 2. Max. solder temperature, 350 °C. 3. Max. soldering time, 3.5 sec. 4. Do not bend lead at a point closer than 2 mm. to the body. 	<p>Voltage 400 to 1000 V.</p> <p>Current 1.0 A. at 50 °C.</p>
	<ul style="list-style-type: none"> • Glass passivated junction • High current capability • The plastic material carries U/L recognition 94 V-0 • Terminals: Axial Leads • Polarity: Color band denotes cathode

Maximum Ratings, according to IEC publication No. 134

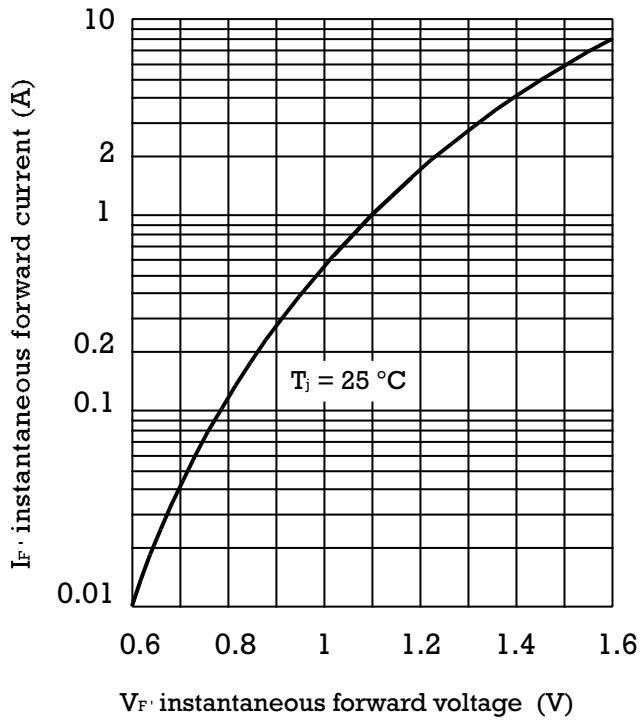
		BA157GP	BA158GP	BA159GP
V_{RRM}	Peak recurrent and non recurrent reverse voltage (V)	400	600	1000
$I_{F(AV)}$	Forward current at $T_{amb} = 50\text{ °C}$	1 A		
I_{FRM}	Recurrent peak forward current	9 A		
I_{FSM}	10 ms. peak forward surge current	35 A		
t_{rr}	Max. reverse recovery time from $I_F = 0.5\text{ A}$ $I_R = 1\text{ A}$ $I_{RR} = 0.25\text{ A}$	150 ns	250 ns	500 ns
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 $T_{amb} = 25\text{ °C}$

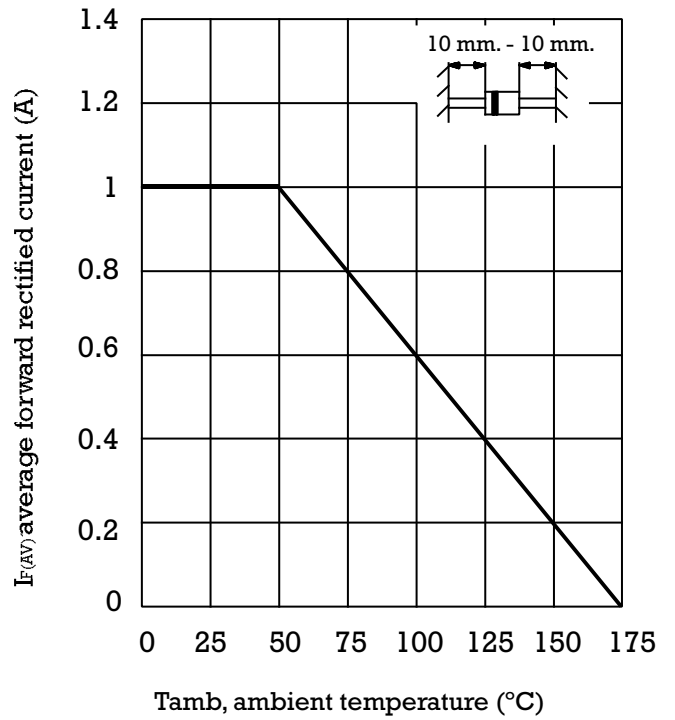
V_F	Forward voltage drop at $I_F = 1\text{ A}$	1.3 V
I_R	Reverse current at V_{RRM} at 25 °C at 125 °C	5 $\mu\text{ A}$ 100 $\mu\text{ A}$
R_{thj-a}	Thermal resistance ($l = 10\text{ mm.}$) Max. Typ.	60 °C/W 45 °C/W

Rating And Characteristic Curves

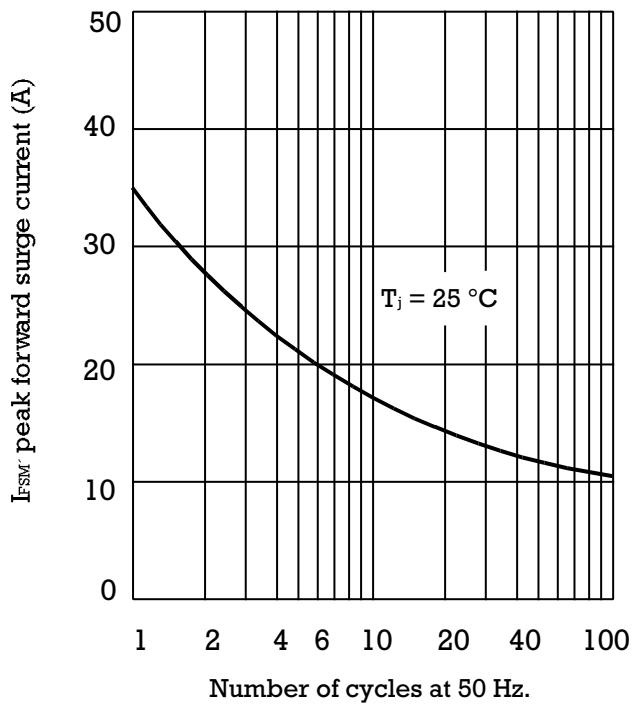
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

