





**0.5 Amp. Glass Passivated Fast Recovery Rectifier**

<p><b>DO-204AL (DO-41)</b></p> 	<p><b>Voltage</b> 1200 to 2000 V</p>	<p><b>Current</b> 0.5 A at 55 °C</p>	
			
	<p><b>FEATURE</b></p> <ul style="list-style-type: none"> <li>• Low profile package</li> <li>• Low power losses, high efficiency</li> <li>• High surge current capability</li> <li>• Low forward voltage drop</li> <li>• Solder dip 260 °C, 10s</li> <li>• AEC-Q101 qualified</li> <li>• Fast switching for high efficiency</li> <li>• Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC</li> <li>• Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C</li> </ul>		  <b>RoHS</b> COMPLIANT
	<p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• <b>Case:</b> DO-204AL (DO-41). Epoxy meets UL 94V-0 flammability rating.</li> <li>• <b>Polarity:</b> Color band denotes cathode end.</li> <li>• <b>Terminals:</b> Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.</li> </ul>		
<p><b>TYPICAL APPLICATIONS</b></p> <p>For use in fast switching rectification of power supply, inverters, converters, an freewheeling diodes for consumer, and telecommunication.</p>			

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

		<b>RGP02 -12</b>	<b>RGP02 -14</b>	<b>RGP02 -16</b>	<b>RGP02 -18</b>	<b>RGP02 -20</b>
$V_{RRM}$	Peak Recurrent Reverse Voltage (V)	1200	1400	1600	1800	2000
$I_{F(AV)}$	Forward Current at $T_{amb} = 55\text{ °C}$	0.5 A				
$I_{FRM}$	Recurrent Peak Forward Current	7 A				
$I_{FSM}$	8.3 ms. Peak Forward Surge Current (Jedec Method)	20 A				
$t_{rr}$	Maximum reverse recovery time from $I_F = 0.5\text{ A}$ ; $I_R = 1\text{ A}$ ; $I_{RR} = 0.25\text{ A}$	300 ns				
$T_j$	Operating Temperature Range	-65 to +175°C				
$T_{stg}$	Storage Temperature Range	-65 to +175°C				

**Electrical Characteristics at  $T_{amb} = 25\text{ °C}$** 

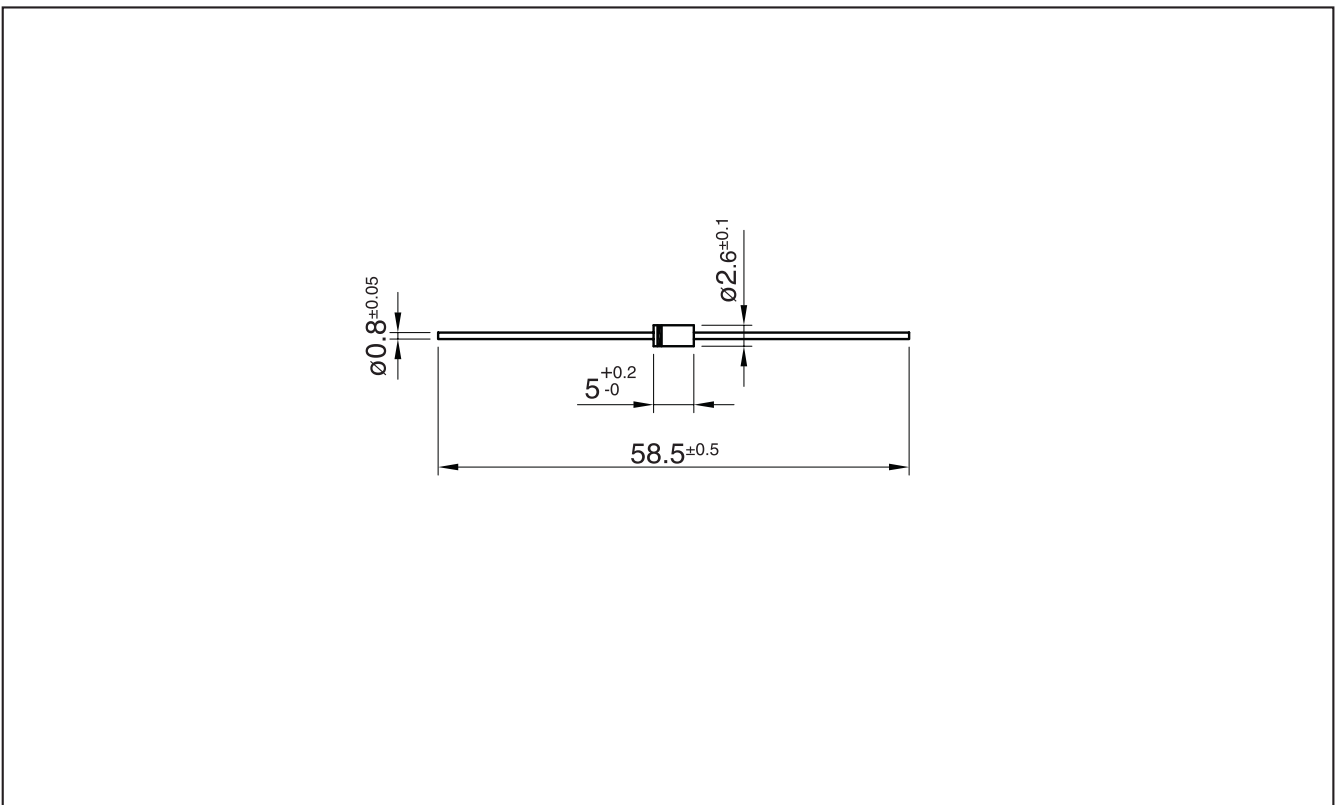
$V_F$	Maximum Forward Voltage Drop at $I_F = 0.5\text{ A}$ $I_F = 0.1\text{ A}$	2.2 V
		1.8 V
$I_R$	Maximun Reverse Current at $V_{RRM}$ at 25 °C	5 $\mu\text{A}$
	at 150 °C	200 $\mu\text{A}$
$R_{th(j-a)}$	Thermal Resistance ( $l = 10\text{mm.}$ )	Max.
		Typ.
		60 °C/W
		45 °C/W

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**Ordering Information**

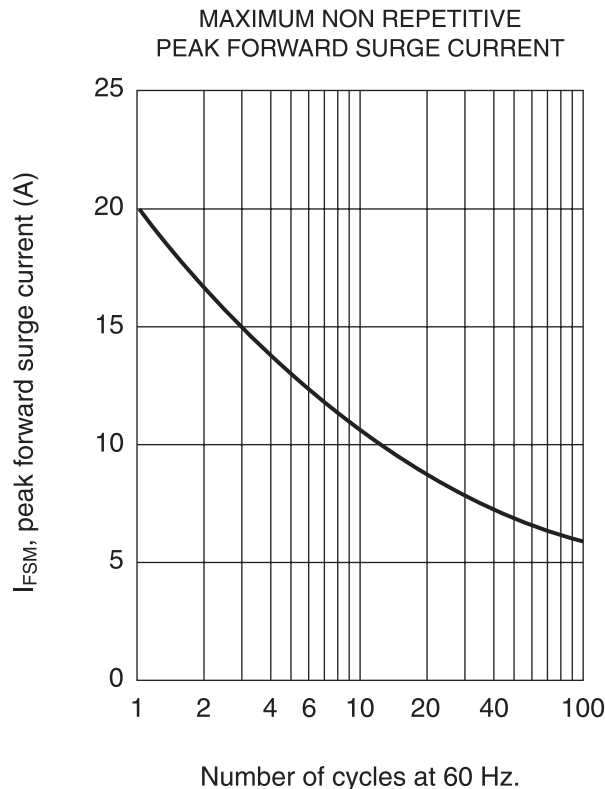
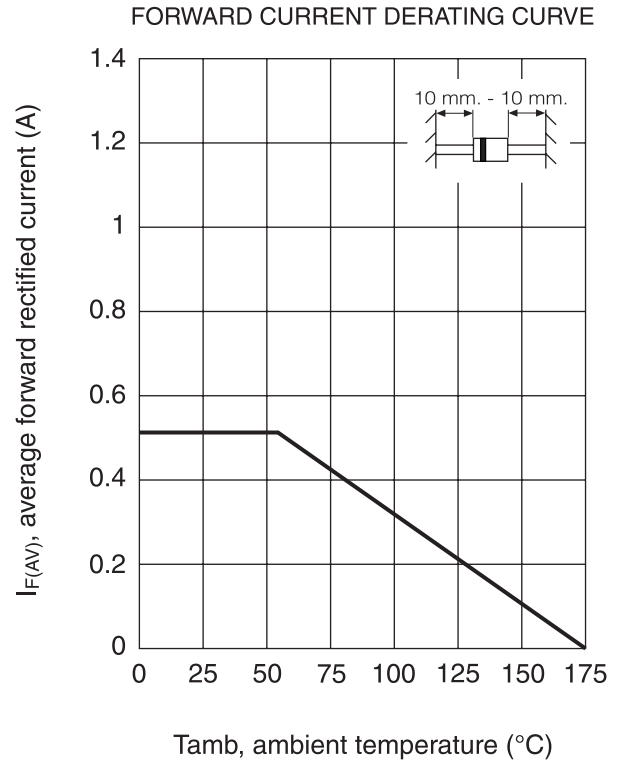
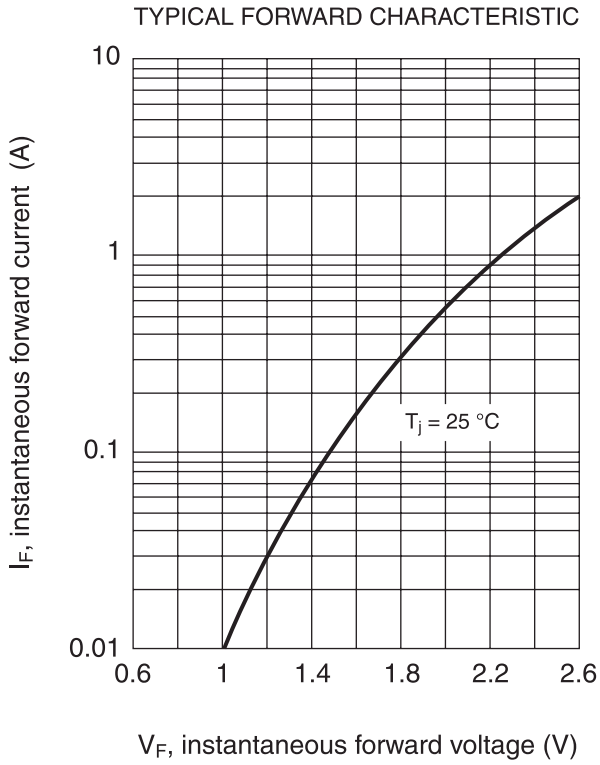
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
RGP02-20 AMP	AMP	AMMO BOX	5,000	0.325
GP02-20 TR	TR	14" diameter tape and reel	5,000	0.325

**Package Outline Dimensions: (mm) DO-204AL (DO-41)**



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**Ratings and Characteristics** (Ta 25 °C unless otherwise noted)



**0.5 Amp. Glass Passivated Fast Recovery Rectifier****Revision History**

DATE	REVISION	DESCRIPTION OF CHANGES
12-Sep-2009	0	Original Data Sheet
25-Nov-2016	1	Format update

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