

1.0 Amp. Glass Passivated Junction Rectifier

<p>DO-204AL (DO-41)</p> 	<p>Voltage 50V to 1000 V</p> <p>Current 1.0 A at 75° C</p> <p style="color: red; font-weight: bold; text-align: center;">HYPERECTIFIER®</p>
<p>FEATURES</p> <ul style="list-style-type: none"> Glass passivated chip junction Hyperectifier structure for high reliability Cavity-free glass-passivated junction Low forward voltage drop Low leakage current, typical I_R less than 0.1 μA High forward surge capability Solder dip 260°C, 10s Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC 	
  <p>RoHS COMPLIANT</p>	
<p>MECHANICAL DATA</p> <ul style="list-style-type: none"> Case: DO-204AL (DO-41) Epoxy meets UL 94V-0 flammability rating. Polarity: Color band denotes cathode end Terminals: 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. 	
<p>TYPICAL APPLICATIONS</p> <p>Used in general purpose rectification of power supplies, inverters, converters and freewheeling diodes application</p>	

Maximum Ratings and Electrical Characteristics at 25°C

		1N4001GP	1N4002GP	1N4003GP	1N4004GP	1N4005GP	1N4006GP	1N4007GP
V_{RRM}	Peak Recurrent Reverse Voltage (V)	50	100	200	400	600	800	1000
$I_{F(AV)}$	Forward Current at $T_{amb} = 75^\circ C$	1.0 A						
I_{FRM}	Recurrent Peak Forward Current	10 A						
I_{FSM}	8.3 ms. Peak Forward Surge Current (Jedec Method)	30 A						
I^2t^*	Rating for fusing ($t < 8.3ms$)	3.7 A ² s						
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. $I_R = 0.5 A; T_j = 25^\circ C$	20 mJ						

Electrical Characteristics at $T_{amb} = 25^\circ C$

V_F	Maximum Forward Voltage Drop at $I_F = 1 A$	1.1 V
I_R	Maximum Reverse Current at V_{RRM}	5 μ A
	at 25 °C	50 μ A
	at 125 °C	
$R_{th(j-a)}$	Thermal Resistance (l = 10mm.)	Max. 60 °C/W
		Typ. 45 °C/W

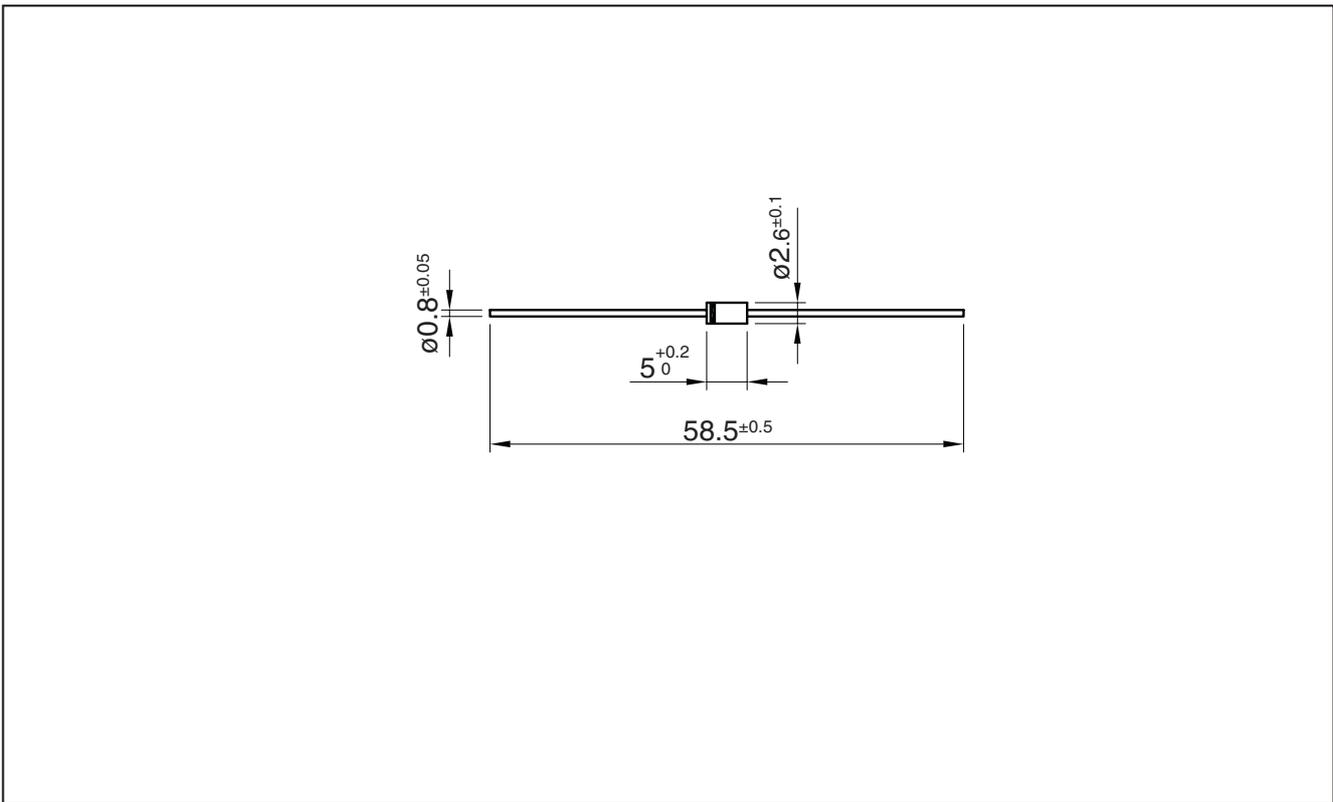
* For device using on bridge rectifier application

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Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
1N4003GP AMP	AMP	AMMO BOX	5,000	0.325
1N4003GP TR	TR	14" diameter tape and reel	5,000	0.325

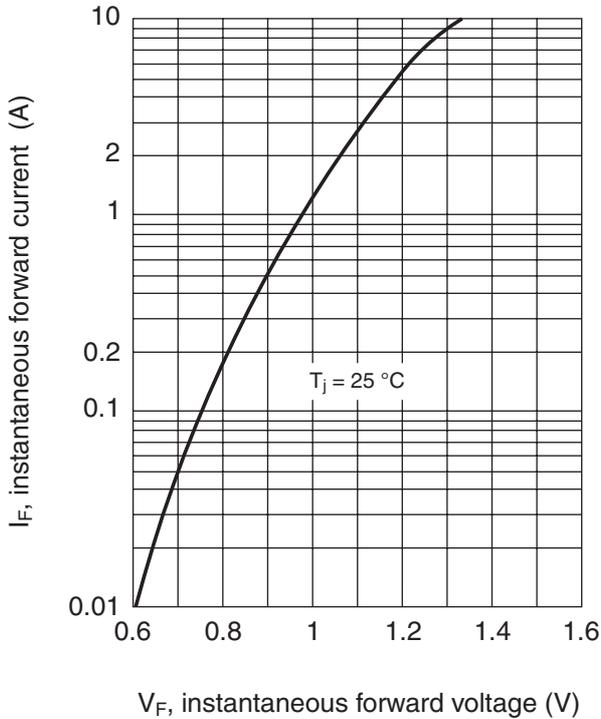
Package Outline Dimensions: (mm) DO-204AL (DO-41)



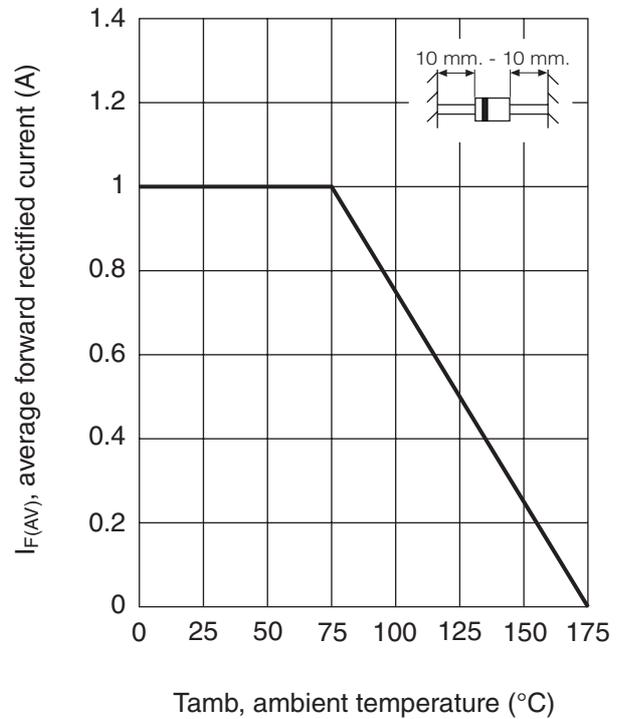
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

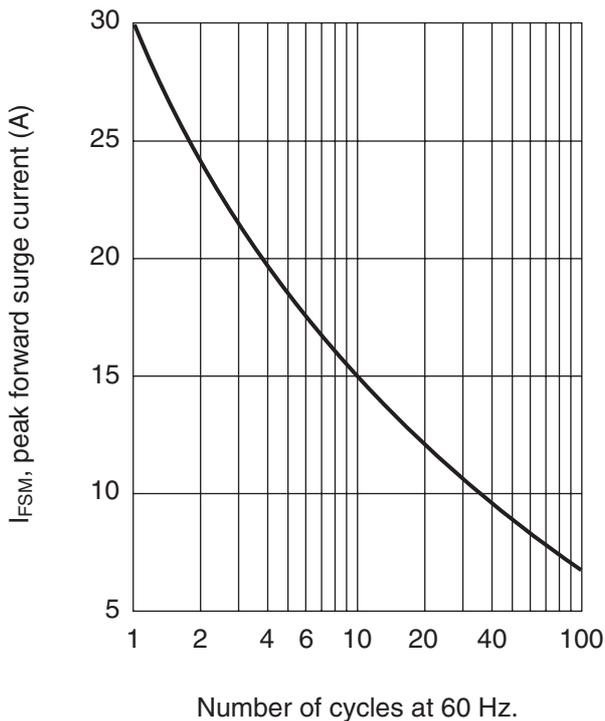
TYPICAL FORWARD CHARACTERISTIC



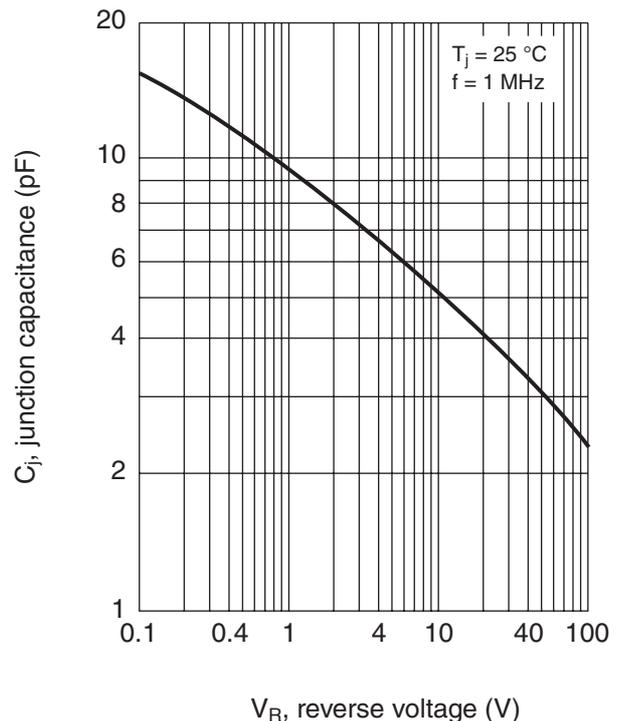
FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



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