





1.0 Amp. Glass Passivated Fast Recovery Rectifier

<p>DO-204AL (DO-41)</p> 	<p>Voltage 400V to 1000V</p>	<p>Current 1.0 A at 50 °C</p>	
			
	<p>FEATURES</p> <ul style="list-style-type: none"> Low profile package Low power losses, high efficiency High surge current capability Cavity-free glass-passivated junction Low forward voltage drop Solder dip 260°C, 10s AEC-Q101 qualified Fast switching for high efficiency Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C 		  RoHS COMPLIANT
	<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>For use in fast switching rectification of power supply, inverters, converters, and freewheeling diodes for consumer, and telecommunication.</p>			

Maximum Ratings and Electrical Characteristics at 25 °C

		BA157GP	BA158GP	BA159GP
V_{RRM}	Peak Recurrent and non 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 (Jedec Method)	35 A		
t_{rr}	Maximum reverse recovery time from $I_F = 0.5\text{ A}$; $I_R = 1\text{ A}$; $I_{RR} = 0.25\text{ A}$	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 $T_{amb} = 25\text{ °C}$

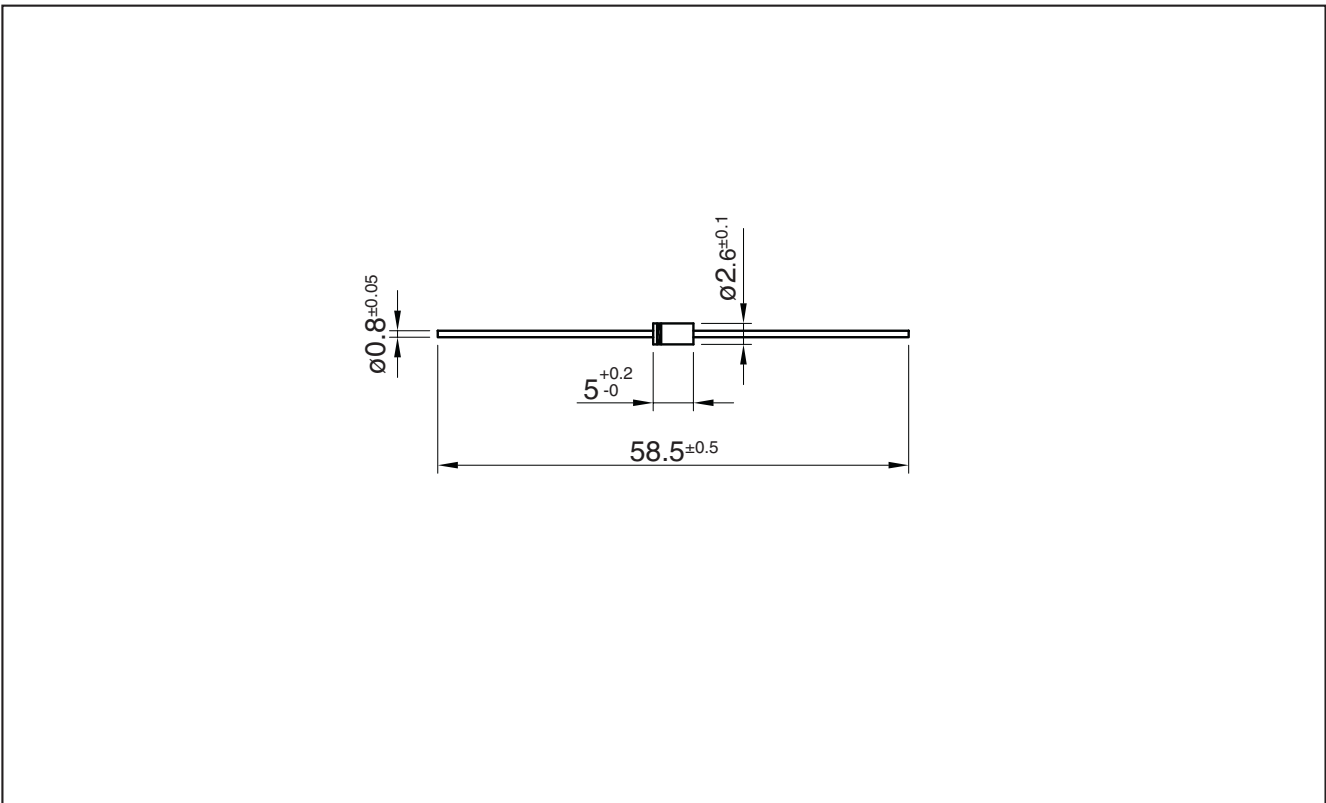
V_F	Maximum Forward Voltage Drop at $I_F = 1\text{ A}$	1.3 V
I_R	Reverse Current at V_{RRM}	5 μA
	at 25 °C	100 μA
	at 125 °C	
$R_{th(j-a)}$	Thermal Resistance ($l = 10\text{mm.}$)	60 °C/W
	Max.	45 °C/W
	Typ.	

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Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
BA158GP AMP	AMP	AMMO BOX	5,000	0.325
BA158GP TR	TR	14" diameter tape and reel	5,000	0.325

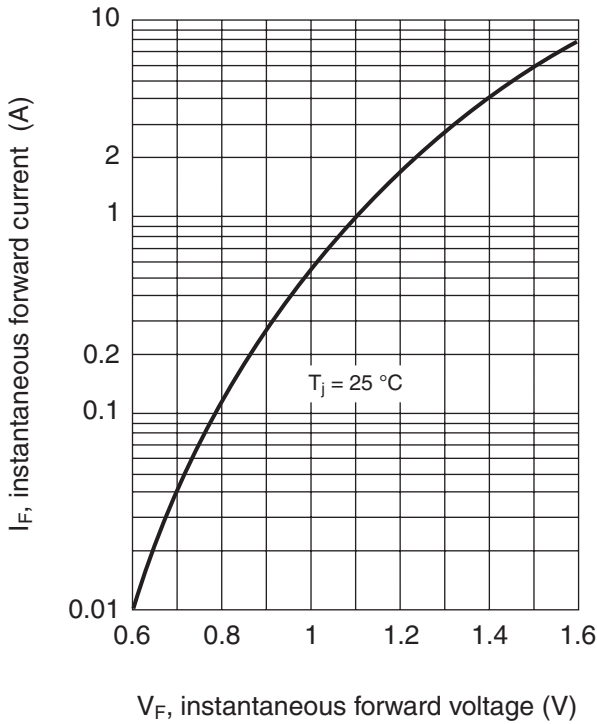
Package Outline Dimensions: (mm) DO-204AL (DO-41)



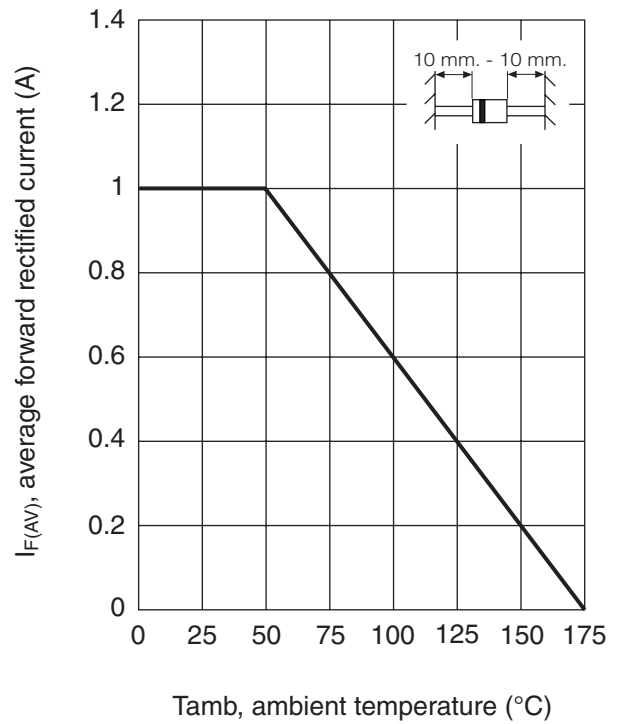
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

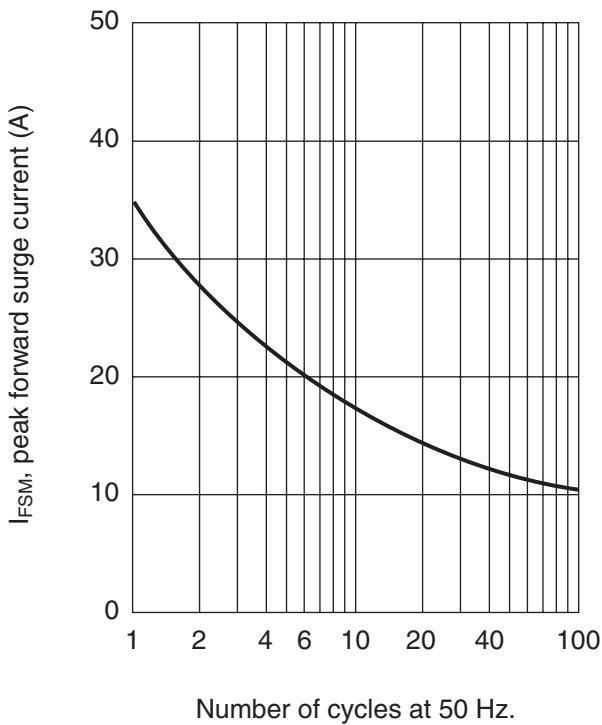
TYPICAL FORWARD CHARACTERISTIC



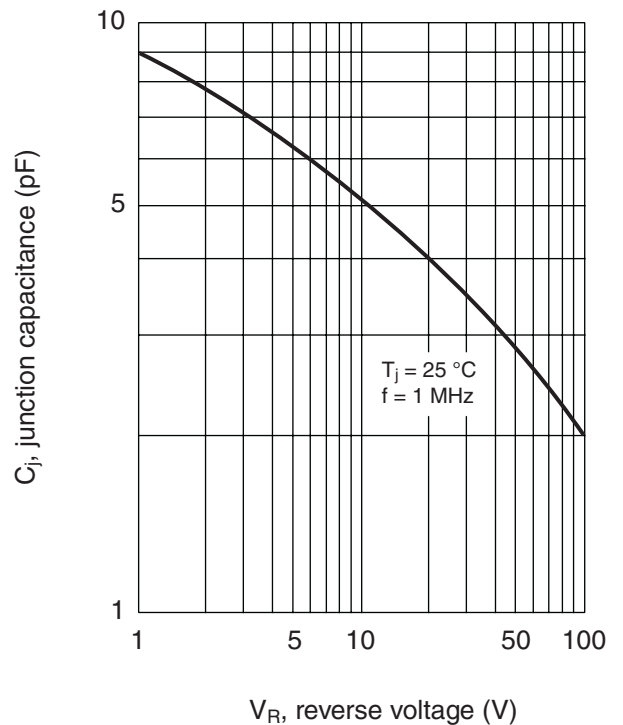
FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



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

Date	Revision	Description of Changes
12-Sep-2009	0	Original Data Sheet
22-Nov-2016	1	Format update

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