

2A01G - 2A07G

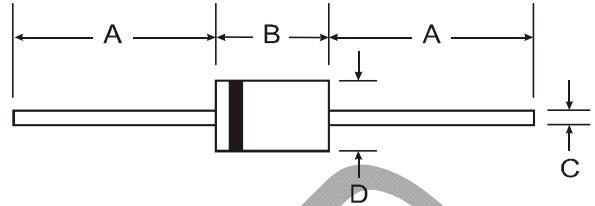
2.0A GLASS PASSIVATED RECTIFIER

Features

- Glass Passivated Die Construction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 65A Peak
- Lead Free Finish, RoHS Compliant (Note 3)

Mechanical Data

- Case: DO-15
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish – Tin. Solderable per MIL-STD-202, Method 208 (E3)
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 0.4 grams (approximate)



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.6
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristic	Symbol	2A01G	2A02G	2A03G	2A04G	2A05G	2A06G	2A07G	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T _A = 55°C	I _O	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	65							A
Forward Voltage @ I _F = 2.0A	V _{FM}	1.1							V
Peak Reverse Current @ T _A = 25°C	I _{RM}	5.0							μA
at Rated DC Blocking Voltage @ T _A = 100°C	I _{RM}	200							
I ² t Rating For Fusing	I ² _t	17.5							A ² s
Typical Total Capacitance (Note 2)	C _T	40							pF
Typical Thermal Resistance Junction to Ambient	R _{θJA}	60							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175							°C

- Notes:
1. Valid provided that leads are maintained at ambient temperature at a distance of 9.5mm from the case.
 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 3. RoHS revision 13.2.2003. High temperature solder exemption applied, see EU Directive Annex Notes 5 and 7.

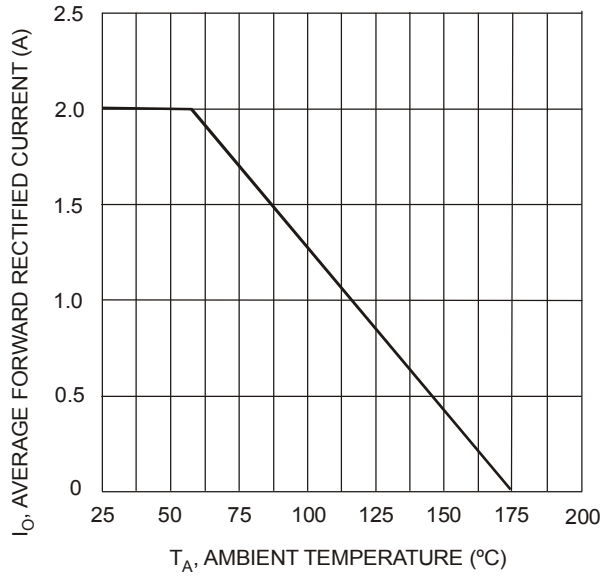


Fig. 1 Forward Current Derating Curve

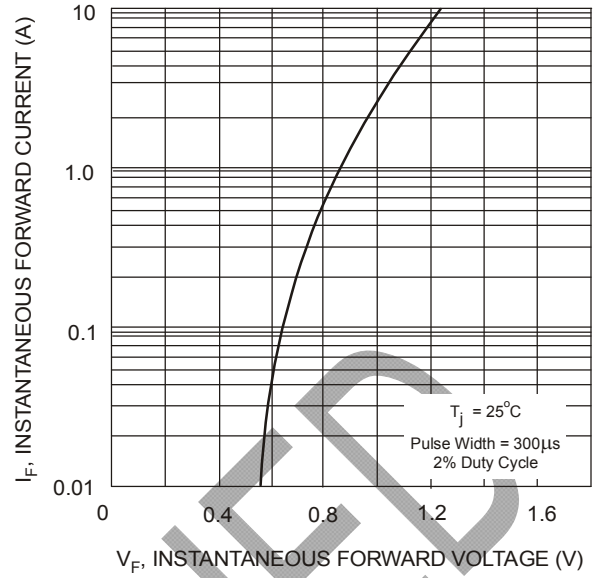


Fig. 2 Typical Forward Characteristics

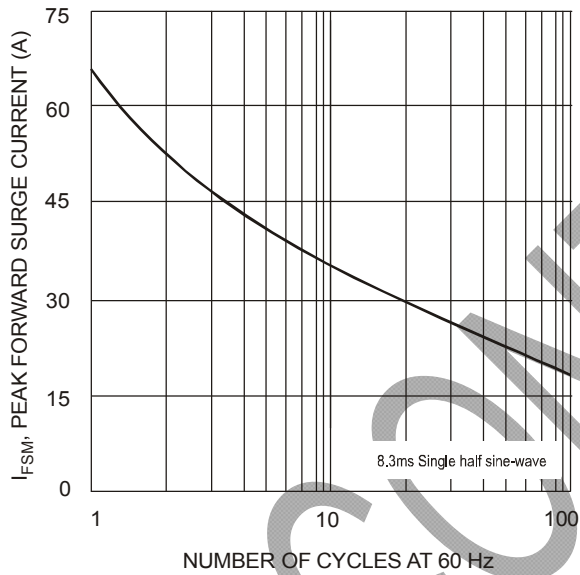


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

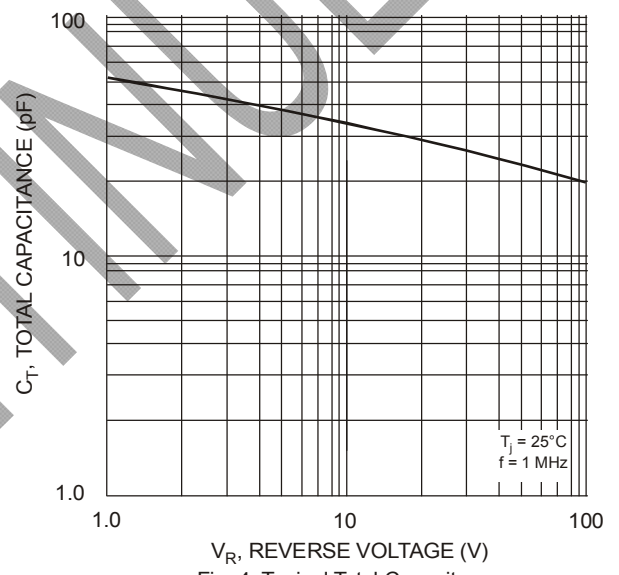


Fig. 4 Typical Total Capacitance

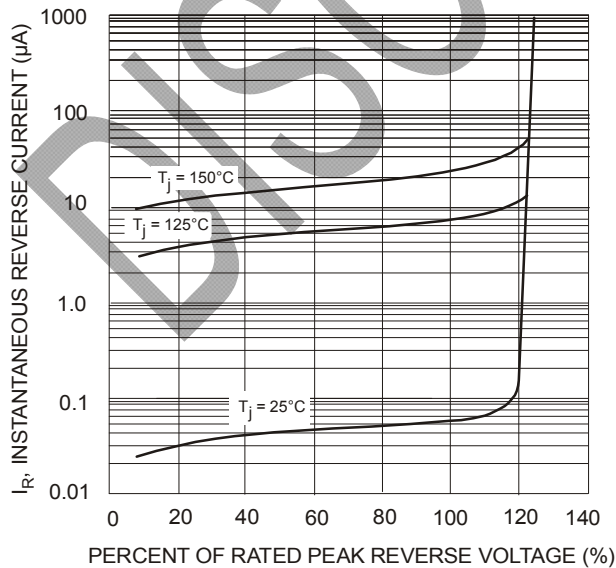


Fig. 5 Typical Reverse Characteristics

Ordering Information (Note 4)

Device	Packaging	Shipping
2A01G-T	DO-15	4K/Tape & Reel, 13-inch
2A02G-T	DO-15	4K/Tape & Reel, 13-inch
2A03G-T	DO-15	4K/Tape & Reel, 13-inch
2A04G-T	DO-15	4K/Tape & Reel, 13-inch
2A05G-T	DO-15	4K/Tape & Reel, 13-inch
2A06G-T	DO-15	4K/Tape & Reel, 13-inch
2A07G-T	DO-15	4K/Tape & Reel, 13-inch

Notes: 4. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

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