

# 2A01 - 2A07

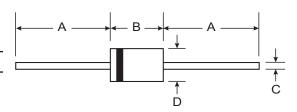
## 2.0A RECTIFIER

### **Features**

- Diffused Junction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 70A 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 Bright Tin. Solderable per MIL-STD-202, Method 208 (e3)
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 0.4 grams (approximate)



DO-15						
Dim	Min	Мах				
Α	25.40	—				
В	5.50	7.62				
С	0.686	0.889				
D	2.60	3.6				
All Dimensions in mm						

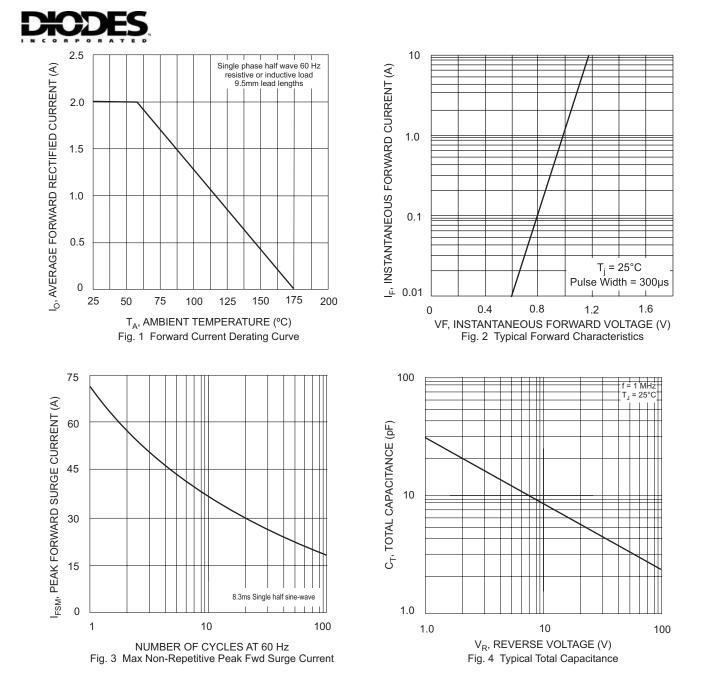
### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

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

Characteristic	Symbol	2A01	2A02	2A03	2A04	2A05	2A06	2A07	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	v
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) (Note 1) ( $P_A = 55^{\circ}C$	IO		•	•	2.0		•	•	А
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>				70				А
Forward Voltage @ I <sub>F</sub> = 2.0A	V <sub>FM</sub>				1.1				V
Peak Reverse Leakage Current $@T_A = 25^{\circ}C$ at Rated DC Blocking Voltage $@T_A = 100^{\circ}C$					5.0 50				μA
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t				17.5				A <sup>2</sup> s
Typical Total Capacitance (Note 2)		15					pF		
Typical Thermal Resistance Junction to Ambient (Note 1)		60					°C/W		
Operating and Storage Temperature Range		-65 to +150						°C	

Notes: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

- 2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V DC.
- 3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.



rdering Information (Note 4)						
Device	Packaging	Shipping				
2A01-T	DO-15	4K/Tape & Reel, 13-inch				
2A02-T	DO-15	4K/Tape & Reel, 13-inch				
2A03-T	DO-15	4K/Tape & Reel, 13-inch				
2A04-T	DO-15	4K/Tape & Reel, 13-inch				
2A05-T	DO-15	4K/Tape & Reel, 13-inch				
2A06-T	DO-15	4K/Tape & Reel, 13-inch				
2A07-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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