

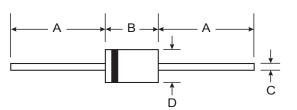
2.0A RECTIFIER

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 @3
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 0.4 grams (approximate)



DO-15					
Dim	Min	Max			
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_A = 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 _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)	Io	2.0				А			
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	м 70			Α				
Forward Voltage @ I _F = 2.0A	V _{FM}	V _{FM} 1.1			V				
Peak Reverse Leakage Current at Rated DC Blocking Voltage @ T _A = 25°C @ T _A = 100°C					5.0 50				μΑ
I ² t Rating for Fusing (t < 8.3ms)	I ² t				17.5				A ² s
Typical Total Capacitance (Note 2)	Ст				15				pF
Typical Thermal Resistance Junction to Ambient (Note 1)		60					°C/W		
Operating and Storage Temperature Range		-65 to +150					°C		

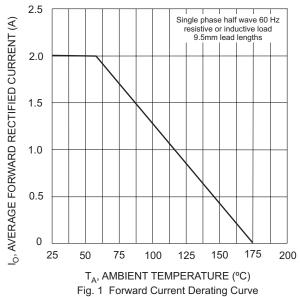
- Notes: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
 - 2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V DC.
 - 3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.



75

0

1



I_F, INSTANTANEOUS FORWARD CURRENT (A) 0.1 Pulse Width = 300µs 0.01 8.0

10

1.0

 $_{\rm IPSM}$, PEAK FORWARD SURGE CURRENT (A) 60 45 30 15

100 C_T, TOTAL CAPACITANCE (pF) 10 1.0 1.0 10 100 V_R , REVERSE VOLTAGE (V) Fig. 4 Typical Total Capacitance

VF, INSTANTANEOUS FORWARD VOLTAGE (V)

Fig. 2 Typical Forward Characteristics

T_i = 25°C

NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

10

8.3ms Single half sine-wave

100

Ordering 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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