

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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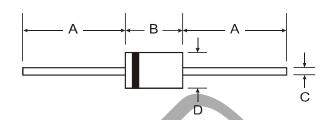
# 2A01 - 2A07

## **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 Dir	mensions	in mm			

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

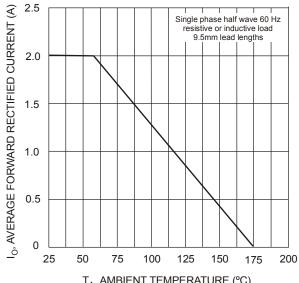
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

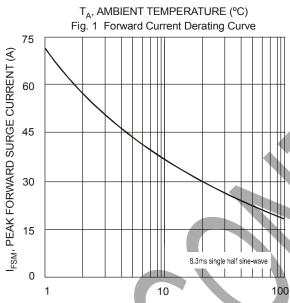
Characteristic	Symbol	2A01	2A02	2A03	2A04	2A05	2A06	2A07	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	٧
RMS Reverse Voltage	V <sub>R</sub> (RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T <sub>A</sub> = 55°C	lo				2.0				Α
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>				70				Α
Forward Voltage @ I <sub>F</sub> = 2.0A	V <sub>FM</sub>	1.1				V			
Peak Reverse Leakage Current at Rated DC Blocking Voltage $T_A = 25^{\circ}$ C $T_A = 100^{\circ}$ C	I <sub>RM</sub>				5.0 50				μА
1 <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	17.5						$A^2s$	
Typical Total Capacitance (Note 2)	C <sub>T</sub>	15				pF			
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{ heta JA}$	60					°C/W		
Operating and Storage Temperature Range	T <sub>j,</sub> T <sub>STG</sub>			-6	65 to +15	50			°C

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

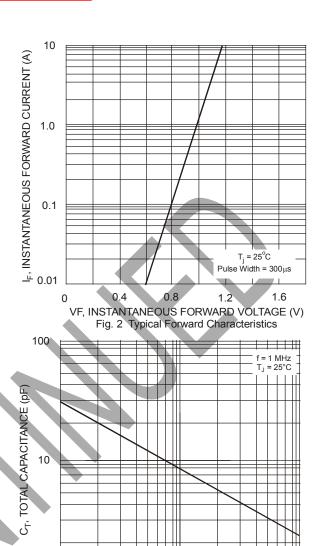
- Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
   RoHS revision 13.2.2003. High temperature solder exemption applied, see *EU Directive Annex Notes 5 and 7*.







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



10

 $V_R$ , REVERSE VOLTAGE (V) Fig. 4 Typical Total Capacitance 100

1.0

1.0



## **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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