



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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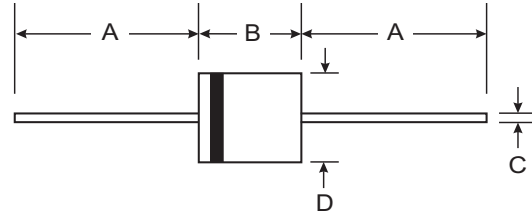


### Features

- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 600A Peak
- Low Reverse Leakage Current
- **Lead Free Finish, RoHS Compliant (Note 3)**

### Mechanical Data

- Case: R-6
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish — Tin. Plated Leads Solderable per MIL-STD-202, Method 208 (E3)
- Polarity: Cathode Band
- Ordering Information: See Last Page
- Marking: Type Number
- Weight: 2.1 grams (approximate)



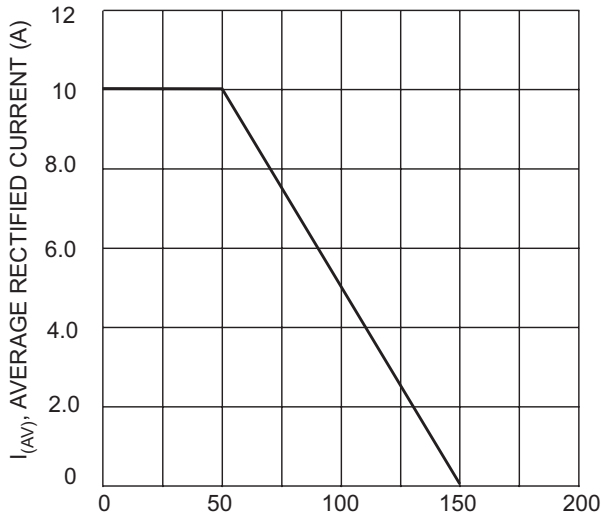
R-6		
Dim	Min	Max
A	25.40	—
B	8.60	9.10
C	1.20	1.30
D	8.60	9.10
All Dimensions in mm		

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

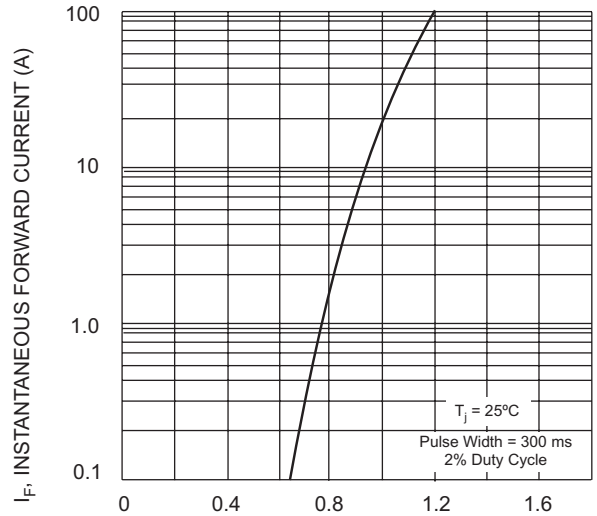
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	10A01	10A02	10A03	10A04	10A05	10A06	10A07	Unit	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Working Peak Reverse Voltage	V <sub>RWM</sub>									
DC Blocking Voltage	V <sub>R</sub>									
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V	
Average Rectified Output Current (Note 1)	I <sub>O</sub>	10							A	
		@ T <sub>A</sub> = 50°C								
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	600							A	
Forward Voltage	V <sub>FM</sub>	1.0							V	
		@ I <sub>F</sub> = 10A								
10Peak Reverse Current	I <sub>RM</sub>	10							μA	
		@ T <sub>A</sub> = 25°C								
		@ T <sub>A</sub> = 100°C								
Typical Total Capacitance (Note 2)	C <sub>T</sub>	150				80				pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	10							°C/W	
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150							°C	

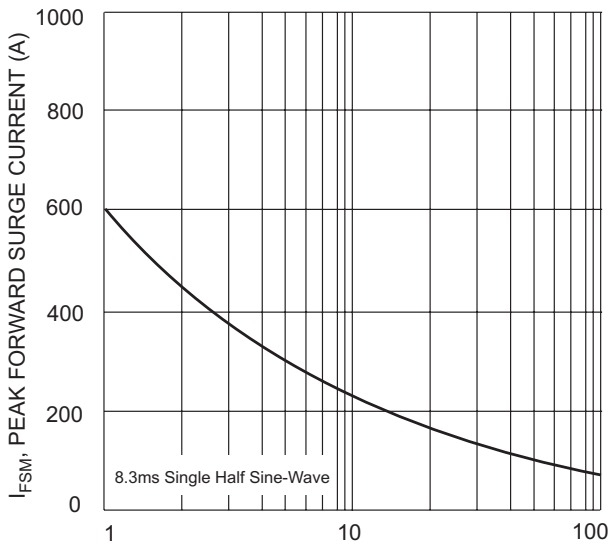
- Notes:
1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
  2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
  3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see *EU Directive Annex Notes 5 and 7*.



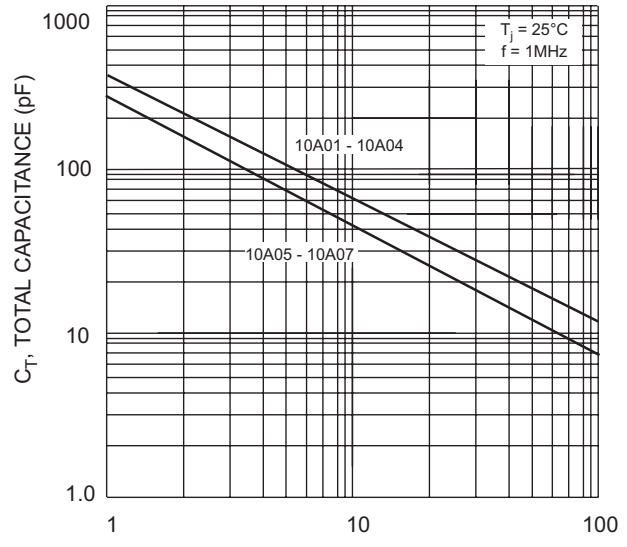
T<sub>A</sub>, AMBIENT TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics



I<sub>FSM</sub>, PEAK FORWARD SURGE CURRENT (A)  
Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current



V<sub>R</sub>, REVERSE VOLTAGE (V)  
Fig. 4 Typical Total Capacitance

**Ordering Information** (Note 4)

Device	Packaging	Shipping
10A01-T	R-6	500/Tape & Reel, 13-inch
10A02-T	R-6	500/Tape & Reel, 13-inch
10A03-T	R-6	500/Tape & Reel, 13-inch
10A04-T	R-6	500/Tape & Reel, 13-inch
10A05-T	R-6	500/Tape & Reel, 13-inch
10A06-T	R-6	500/Tape & Reel, 13-inch
10A07-T	R-6	500/Tape & Reel, 13-inch

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

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