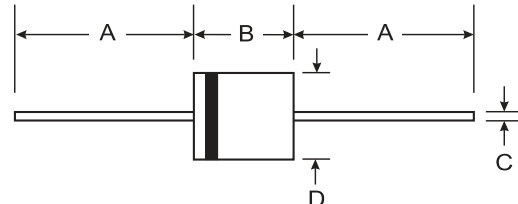


Features

- 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)



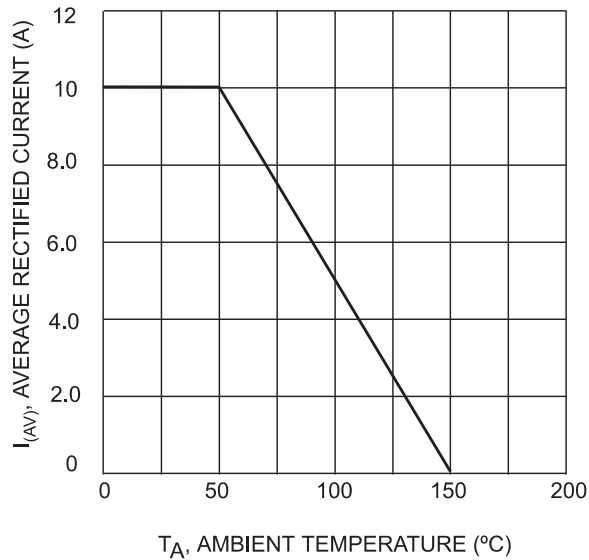
R-6		
Dim	Min	Max
A	25.40	—
B	8.60	9.10
C	1.20	1.30
D	8.60	9.10
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ T_A = 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 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) @ T _A = 50°C	I _O	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	600							A
Forward Voltage @ I _F = 10A	V _{FM}	1.0							V
10Peak Reverse Current @T _A = 25°C at Rated DC Blocking Voltage @ T _A = 100°C	I _{RM}	10 100							μA
Typical Total Capacitance (Note 2)	C _T	150				80			pF
Typical Thermal Resistance Junction to Ambient	R _{θJA}	10							°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-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_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve

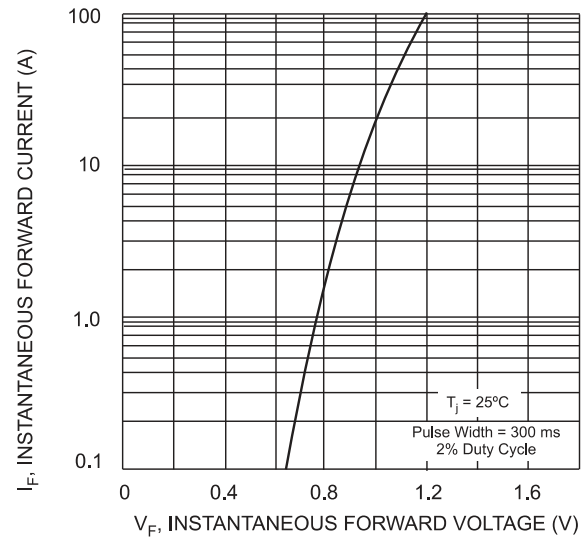


Fig. 2 Typical Forward Characteristics

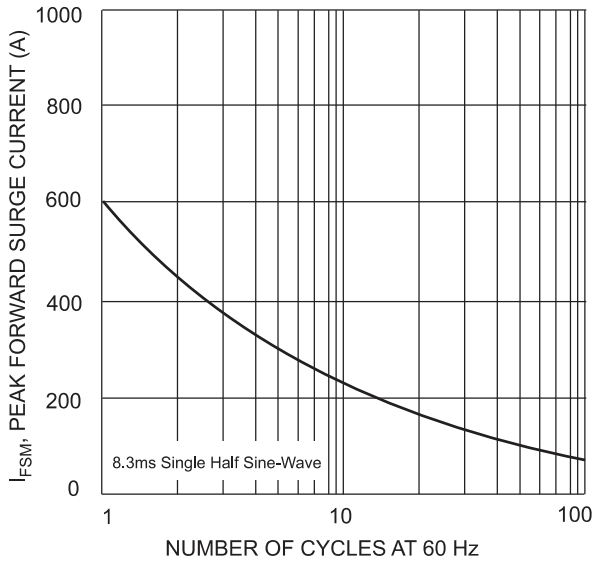


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

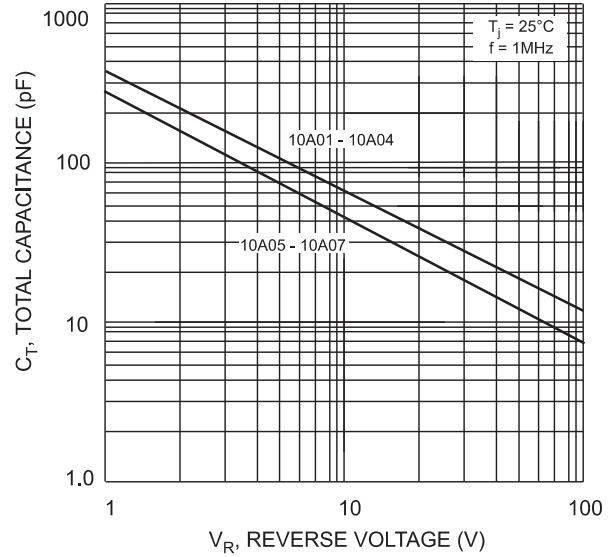


Fig. 4 Typical Total Capacitance

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>