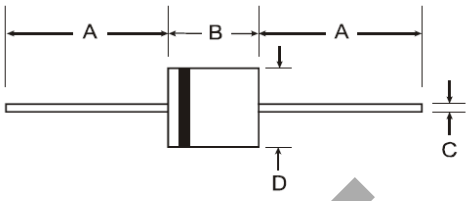
OBSOLETE – PART DISCONTINUED

Features

- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 600A Peak
- Low Reverse Leakage Current
- **Lead Free Finish, RoHS Compliant (Notes 1 & 2)**
- **For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/104/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please contact us or your local Diodes representative. https://www.diodes.com/quality/product-definitions/**



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		

Mechanical Data

- Package: R-6
- Package Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish — Tin. Plated Leads Solderable per MIL-STD-202, Method 208 (e3)
- Polarity: Cathode Band
- Ordering Information: See Next Page
- Marking: Type Number
- Weight: 2.1 grams (Approximate)

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 3)	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
10 Peak Reverse Current at Rated DC Blocking Voltage	T_A = +25°C T_A = +100°C	I_{RM}	10 100							µA
Typical Total Capacitance (Note 4)		C_T	150				80			pF
Typical Thermal Resistance Junction to Ambient		$R_{\theta JA}$	10							°C/W
Operating and Storage Temperature Range		T_j, T_{STG}	-65 to +150							°C

Notes:
1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
4. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

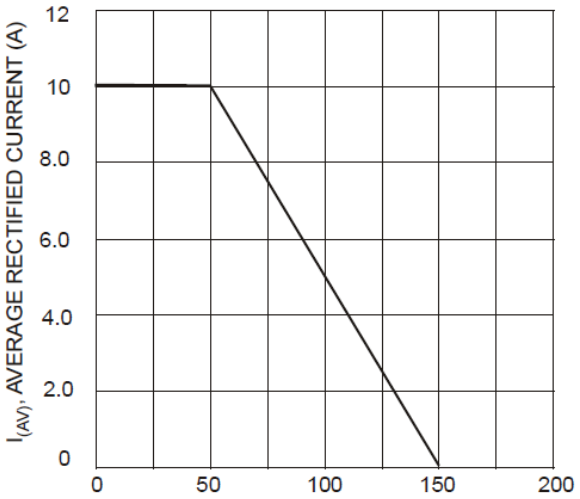


Fig. 1 Forward Current Derating Curve

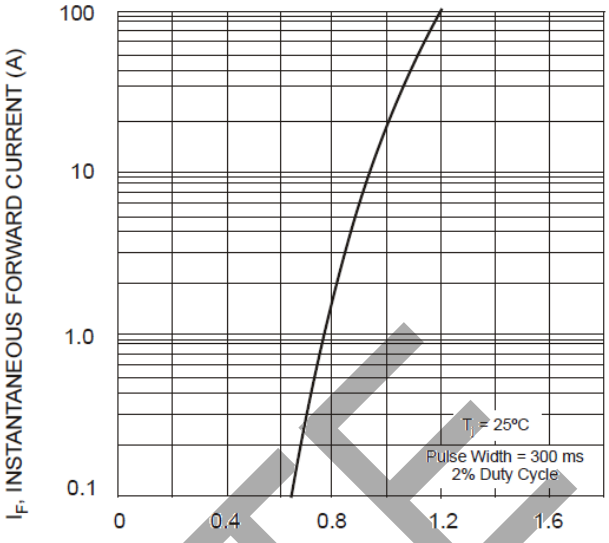


Fig. 2 Typical Forward Characteristics

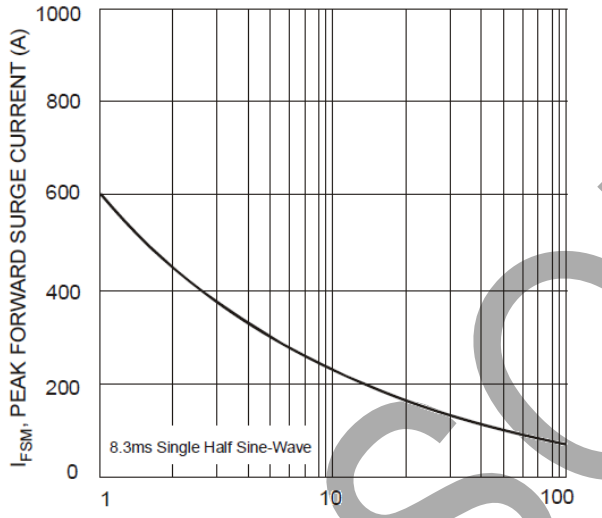


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

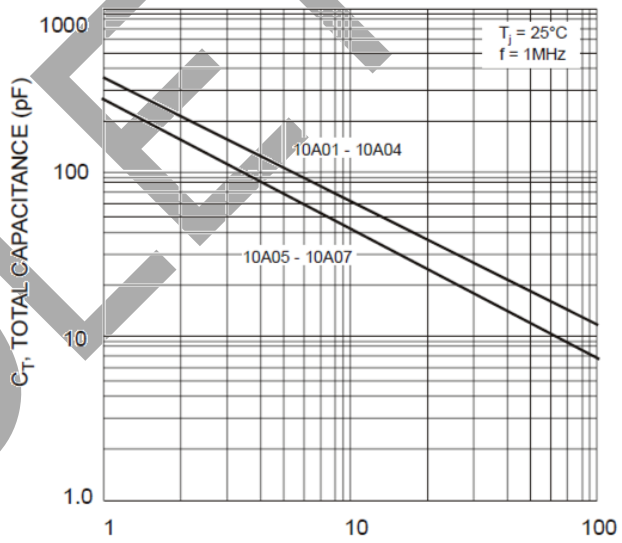


Fig. 4 Typical Total Capacitance

Ordering Information (Note 5)

Part Number	Package	Packing	
		Qty.	Carrier
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

Note: 5. For packaging details, go to our website at https://www.diodes.com/design/support/packaging/diodes-packaging/.

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