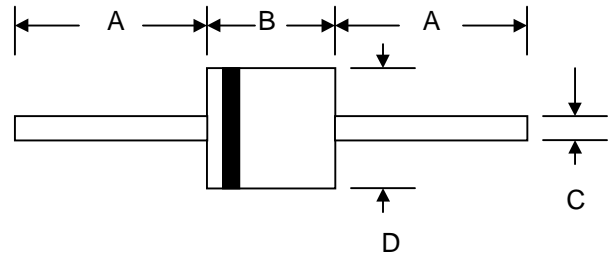


Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



Mechanical Data

- Case: P-600, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 2.1 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

P-600		
Dim	Min	Max
A	25.4	—
B	8.60	9.10
C	1.20	1.30
D	8.60	9.10
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	10A05	10A1	10A2	10A4	10A6	10A8	10A10	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 50^\circ\text{C}$	I_O	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	600							A
Forward Voltage @ $I_F = 10\text{A}$	V_{FM}	1.0							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	10 100							μA
Typical Junction Capacitance (Note 2)	C_j	150				80			pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	10							$^\circ\text{C/W}$
Operating Temperature Range	T_j	-50 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-50 to +150							$^\circ\text{C}$

Note: 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 D.C.

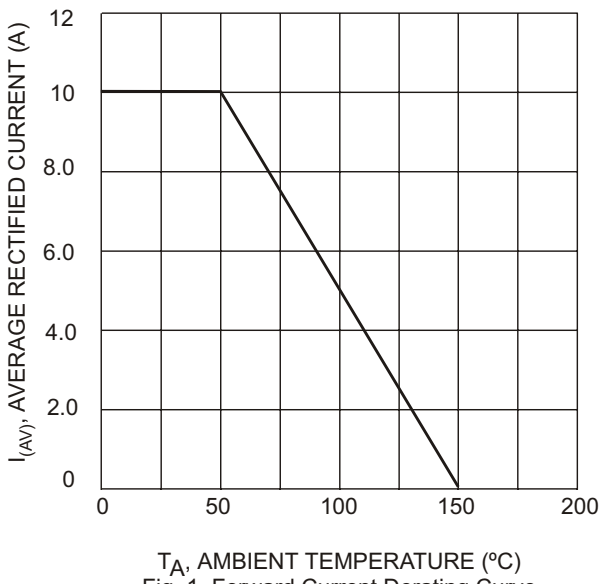


Fig. 1 Forward Current Derating Curve

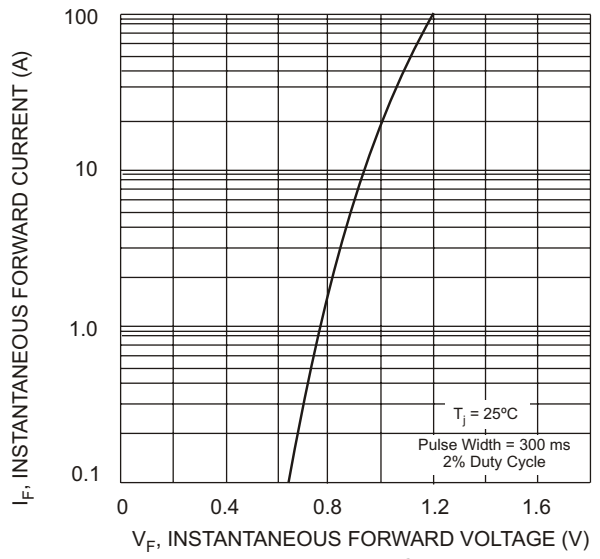


Fig. 2 Typical Forward Characteristics

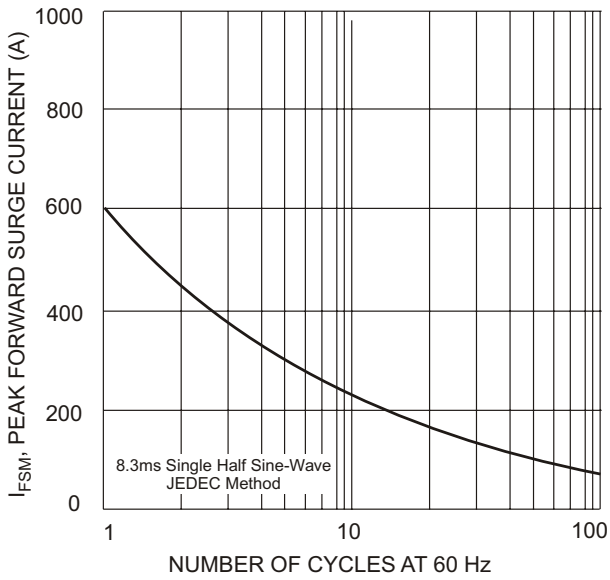


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

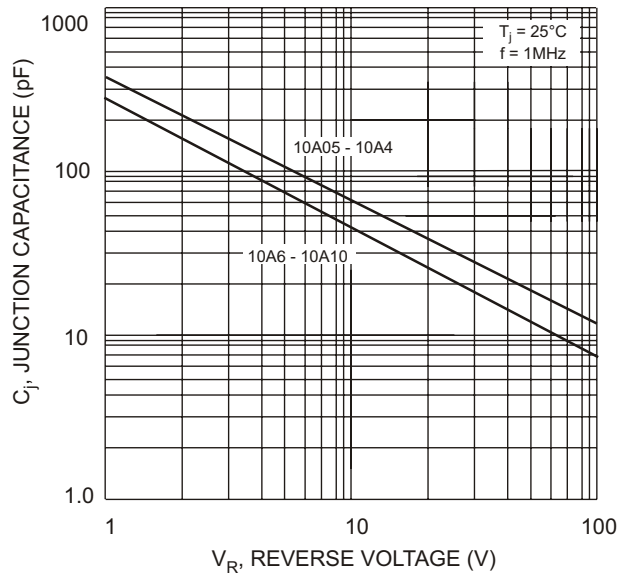
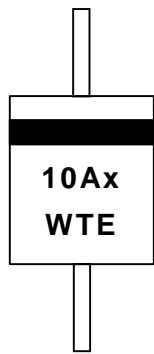


Fig. 4 Typical Junction Capacitance

MARKING INFORMATION



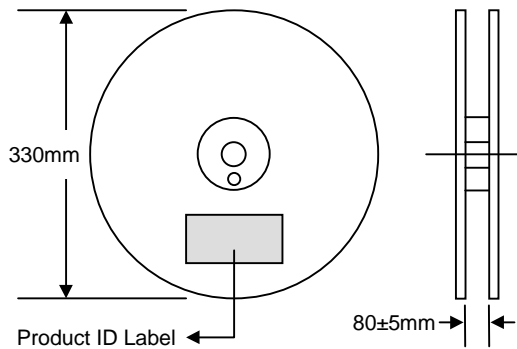
Cathode = Polarity Band
 10Ax = Device Number
 x = 05, 1, 2, 4, 6, 8 or 10
 WTE = Manufacturer's Logo

TAPING SPECIFICATIONS

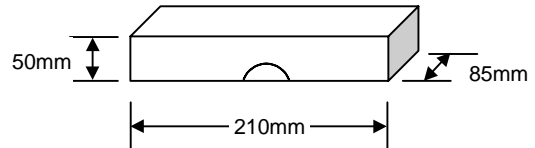


PACKAGING INFORMATION

TAPE & REEL



BULK



Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
TAPE & REEL	330	800	370 x 370 x 420	4,000	12.0
BULK	210 x 85 x 50	250	500 x 255 x 275	7,000	17.0

Note: 1. Paper reel, white or gray color. Core material: plastic or metal.
 2. Components are packed in accordance with EIA standard RS-296-E.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
10A05-T3	P-600	800/Tape & Reel
10A05	P-600	250 Units/Box
10A1-T3	P-600	800/Tape & Reel
10A1	P-600	250 Units/Box
10A2-T3	P-600	800/Tape & Reel
10A2	P-600	250 Units/Box
10A4-T3	P-600	800/Tape & Reel
10A4	P-600	250 Units/Box
10A6-T3	P-600	800/Tape & Reel
10A6	P-600	250 Units/Box
10A8-T3	P-600	800/Tape & Reel
10A8	P-600	250 Units/Box
10A10-T3	P-600	800/Tape & Reel
10A10	P-600	250 Units/Box

1. Products listed in **bold** are WTE **Preferred** devices.
2. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
3. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, 10A05-T3-LF.**

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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We power your everyday.