



10A05 – 10A10

10A STANDARD DIODE

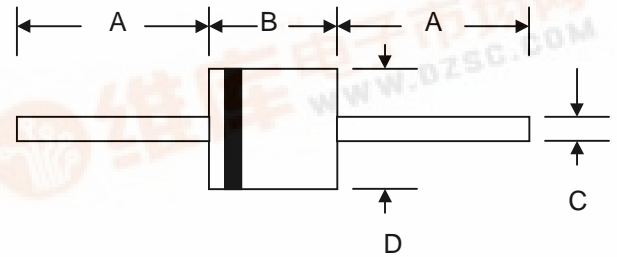


Features

- 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}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
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							$^\circ\text{C}/\text{W}$
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.



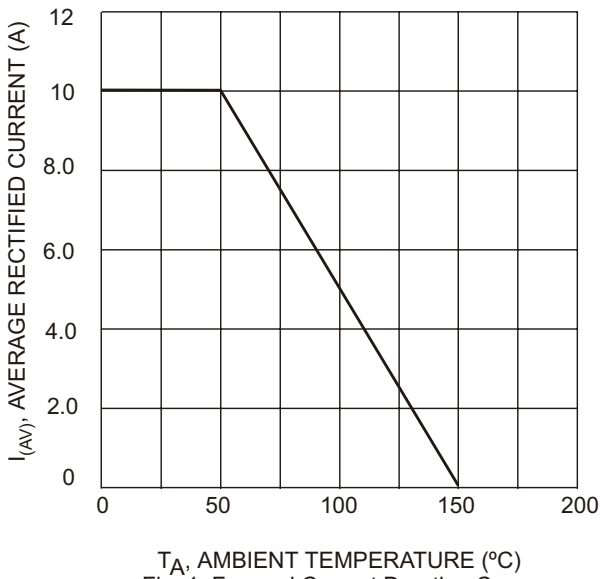


Fig. 1 Forward Current Derating Curve

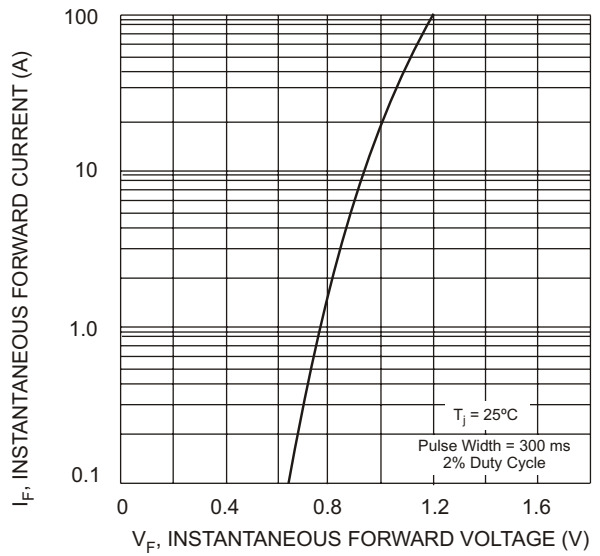


Fig. 2 Typical Forward Characteristics

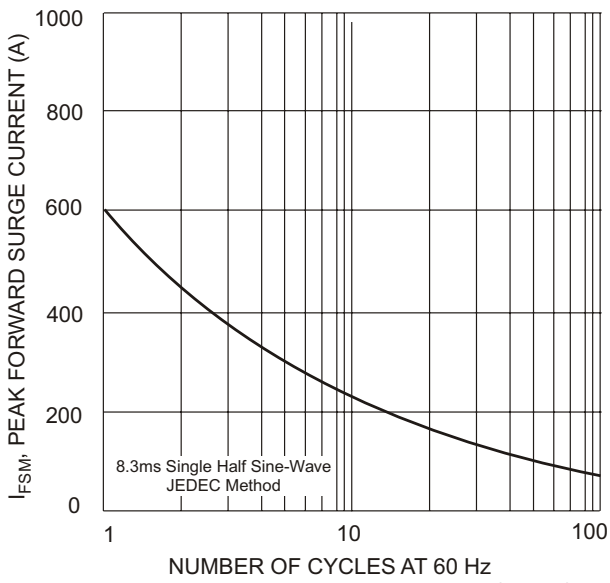


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

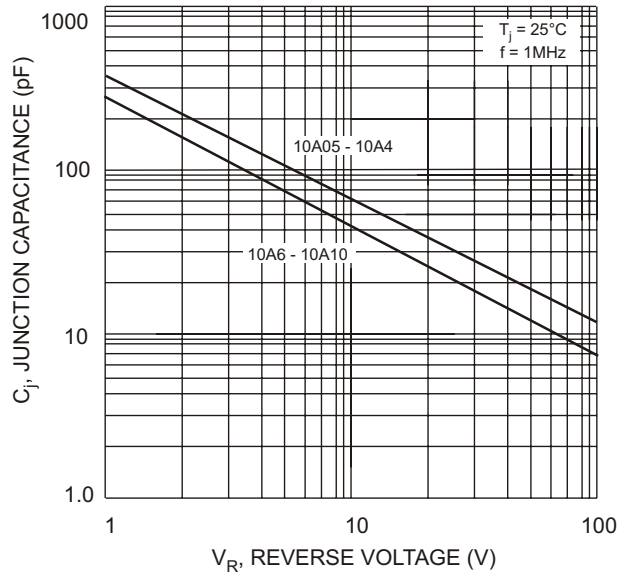
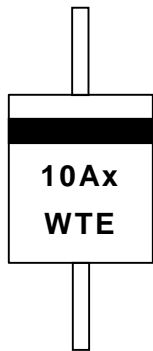


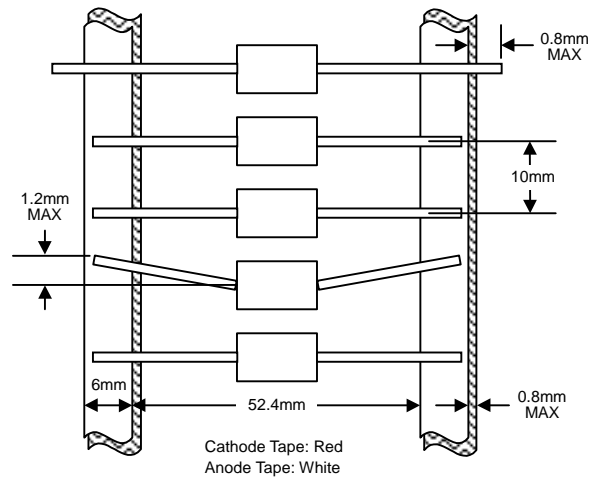
Fig. 4 Typical Junction Capacitance

MARKING INFORMATION



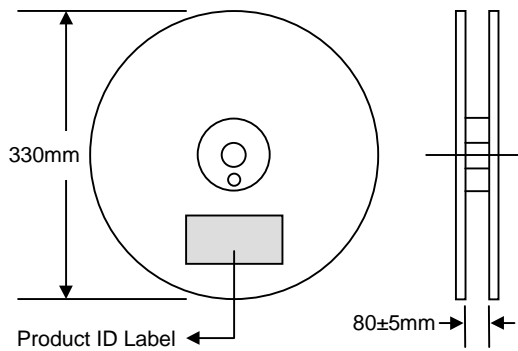
Cathode = Polarity Band
 10Ax = Device Number
 x = 05, 1, 2, 4, 6, 8 or 10
 WTE = Manufacturer's Logo

TAPING SPECIFICATIONS

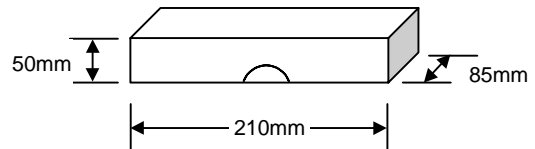


PACKAGING INFORMATION

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.**

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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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