



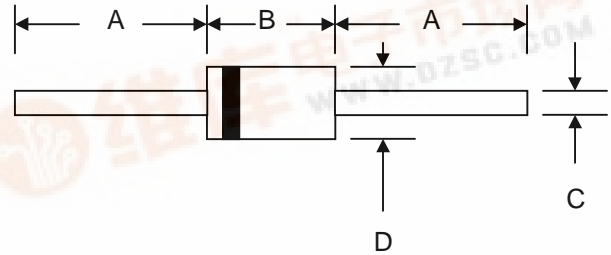
# BY550-50 – BY550-1000



## 5.0A STANDARD DIODE

### Features

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



### Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

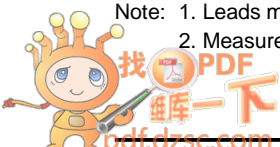
DO-201AD		
Dim	Min	Max
A	25.4	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

### 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	BY550-50	BY550-100	BY550-200	BY550-400	BY550-600	BY550-800	BY550-1000	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$								V
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_R(\text{RMS})$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)	$I_O$	5.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	300							A
Forward Voltage @ $I_F = 5.0\text{A}$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	20 100							$\mu\text{A}$
Typical Junction Capacitance (Note 2)	$C_j$	40							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	30							$^\circ\text{C/W}$
Operating Temperature Range	$T_j$	-65 to +125							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 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.



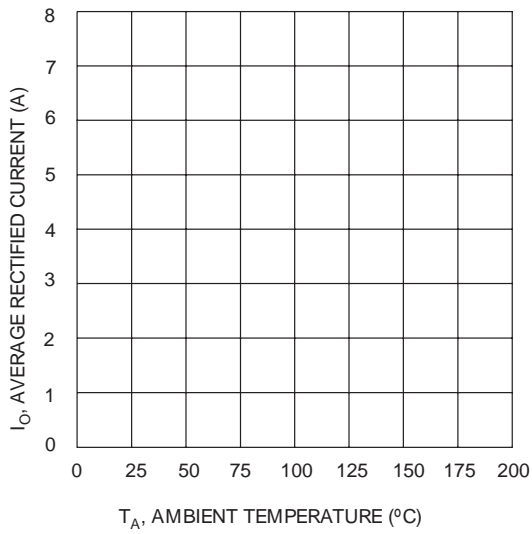


Fig. 1 Forward Current Derating Curve

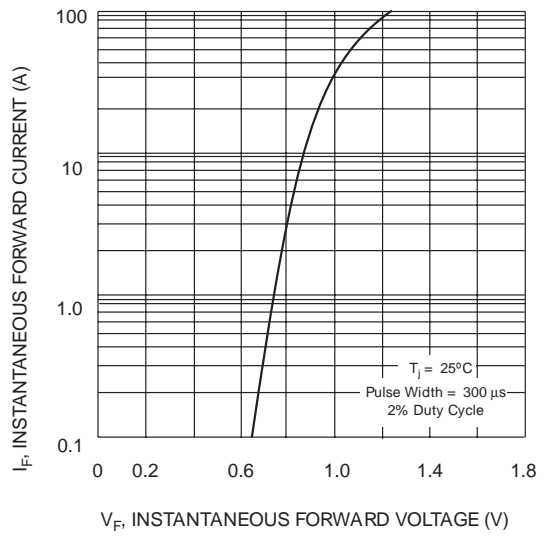


Fig. 2, Typical Forward Characteristics

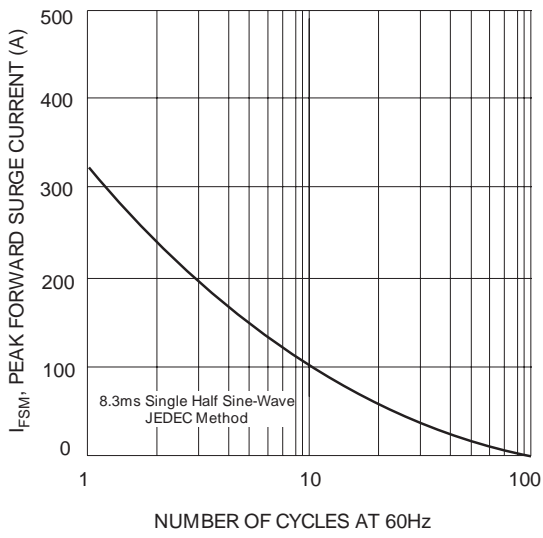


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

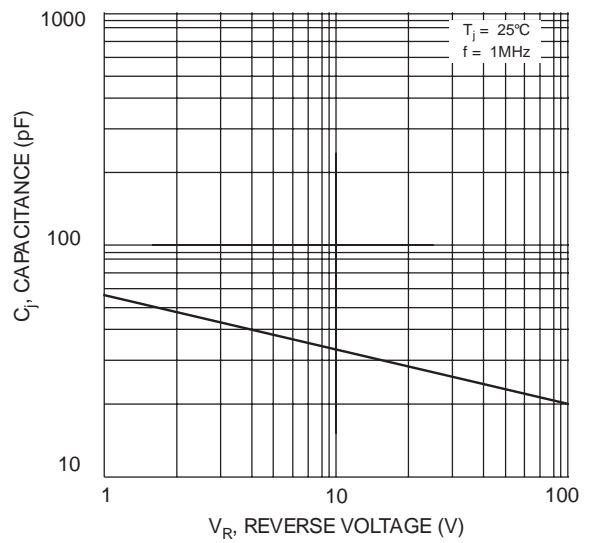
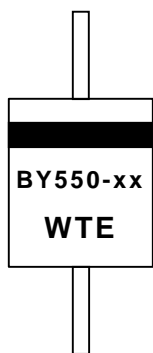


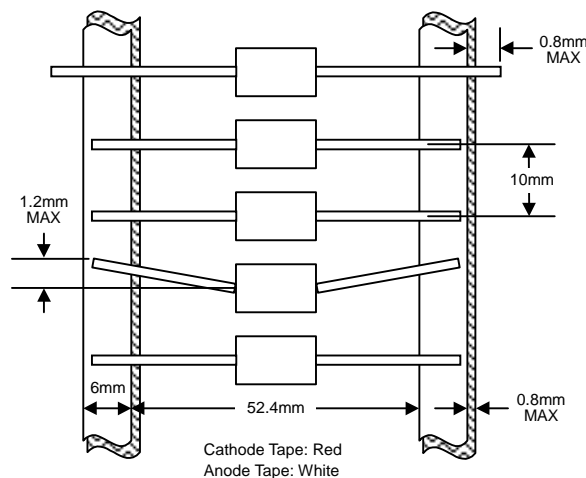
Fig. 4 Typical Junction Capacitance

## MARKING INFORMATION



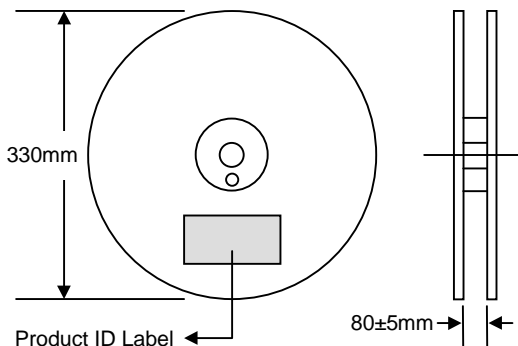
Cathode = Polarity Band  
 BY550-xx = Device Number  
 xx = 50, 100, 200, 400, 600,  
 800 or 1000  
 WTE = Manufacturer's Logo

## TAPING SPECIFICATIONS

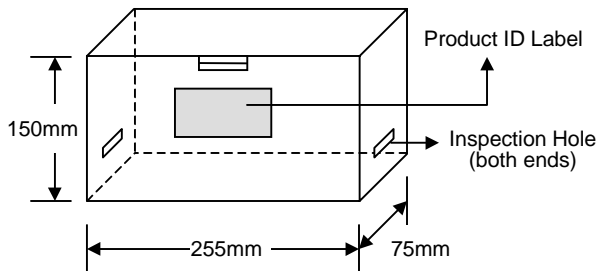


## PACKAGING INFORMATION

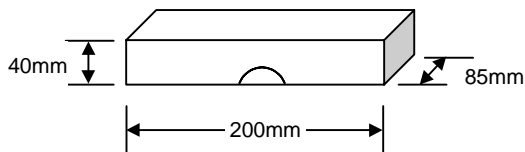
### TAPE & REEL



### TAPE & BOX



### BULK



Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
<b>TAPE &amp; REEL</b>	330	1,200	370 x 370 x 420	6,000	10.0
<b>TAPE &amp; BOX</b>	255 x 75 x 150	1,200	400 x 273 x 415	12,000	17.0
<b>BULK</b>	200 x 85 x 40	500	459 x 214 x 256	12,500	16.0

**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
BY550-50-T3	DO-201AD	1200/Tape & Reel
<b>BY550-50-TB</b>	DO-201AD	1200/Tape & Box
BY550-50	DO-201AD	500 Units/Box
BY550-100-T3	DO-201AD	1200/Tape & Reel
<b>BY550-100-TB</b>	DO-201AD	1200/Tape & Box
BY550-100	DO-201AD	500 Units/Box
BY550-200-T3	DO-201AD	1200/Tape & Reel
<b>BY550-200-TB</b>	DO-201AD	1200/Tape & Box
BY550-200	DO-201AD	500 Units/Box
BY550-400-T3	DO-201AD	1200/Tape & Reel
<b>BY550-400-TB</b>	DO-201AD	1200/Tape & Box
BY550-400	DO-201AD	500 Units/Box
BY550-600-T3	DO-201AD	1200/Tape & Reel
<b>BY550-600-TB</b>	DO-201AD	1200/Tape & Box
BY550-600	DO-201AD	500 Units/Box
BY550-800-T3	DO-201AD	1200/Tape & Reel
<b>BY550-800-TB</b>	DO-201AD	1200/Tape & Box
BY550-800	DO-201AD	500 Units/Box
BY550-1000-T3	DO-201AD	1200/Tape & Reel
<b>BY550-1000-TB</b>	DO-201AD	1200/Tape & Box
BY550-1000	DO-201AD	500 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, BY550-50-TB-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.

**Won-Top Electronics Co., Ltd.**

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

**Phone:** 886-7-822-5408 or 886-7-822-5410

**Fax:** 886-7-822-5417

**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

*We power your everyday.*