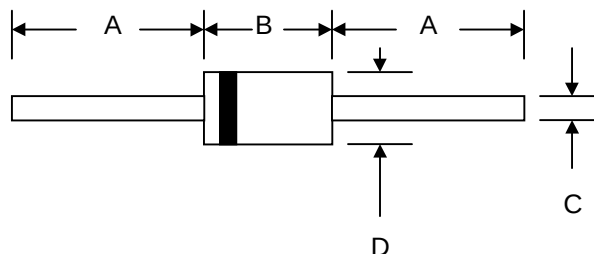


### Features

- 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<sub>A</sub>=25°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<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | V <sub>RRM</sub><br>V <sub>RWM</sub><br>V <sub>R</sub> | 50          | 100       | 200       | 400       | 600       | 800       | 1000       | V    |
| RMS Reverse Voltage                                                                                                   | V <sub>R(RMS)</sub>                                    | 35          | 70        | 140       | 280       | 420       | 560       | 700        | V    |
| Average Rectified Output Current<br>(Note 1)<br>@T <sub>A</sub> = 75°C                                                | I <sub>O</sub>                                         | 5.0         |           |           |           |           |           |            | A    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | I <sub>FSM</sub>                                       | 300         |           |           |           |           |           |            | A    |
| Forward Voltage<br>@I <sub>F</sub> = 5.0A                                                                             | V <sub>FM</sub>                                        | 1.1         |           |           |           |           |           |            | V    |
| Peak Reverse Current<br>@T <sub>A</sub> = 25°C<br>At Rated DC Blocking Voltage<br>@T <sub>A</sub> = 100°C             | I <sub>RM</sub>                                        | 20<br>100   |           |           |           |           |           |            | μA   |
| Typical Junction Capacitance (Note 2)                                                                                 | C <sub>j</sub>                                         | 40          |           |           |           |           |           |            | pF   |
| Typical Thermal Resistance Junction to Ambient<br>(Note 1)                                                            | R <sub>θJA</sub>                                       | 30          |           |           |           |           |           |            | °C/W |
| Operating Temperature Range                                                                                           | T <sub>j</sub>                                         | -65 to +125 |           |           |           |           |           |            | °C   |
| Storage Temperature Range                                                                                             | T <sub>STG</sub>                                       | -65 to +150 |           |           |           |           |           |            | °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.

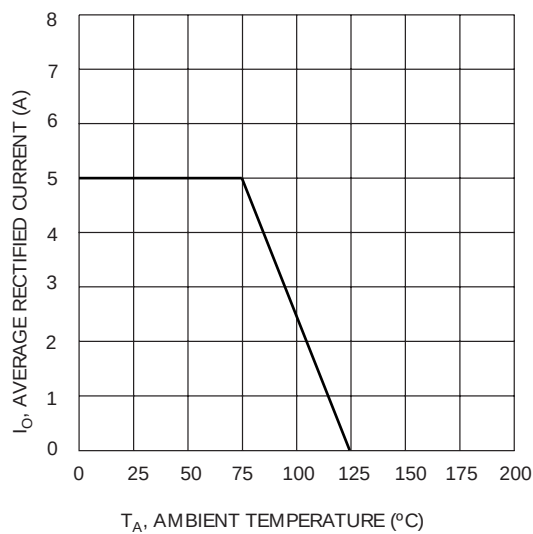


Fig. 1 Forward Current Derating Curve

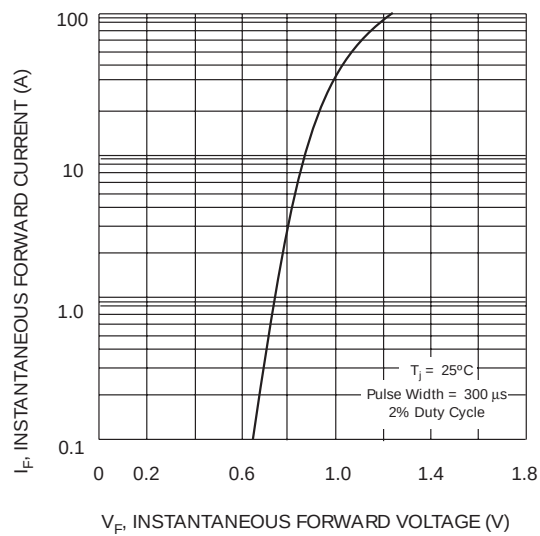


Fig. 2, Typical Forward Characteristics

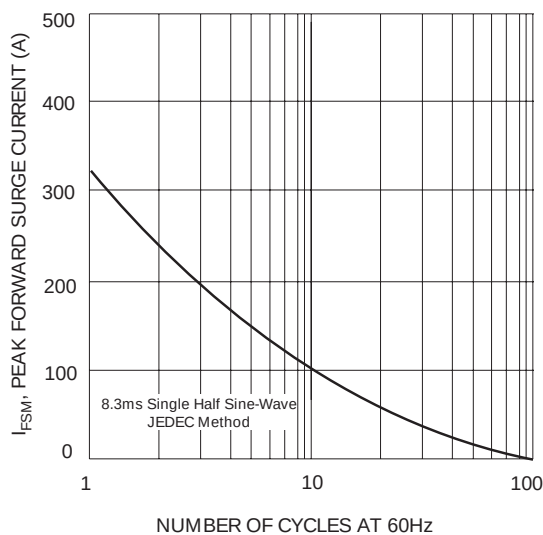


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

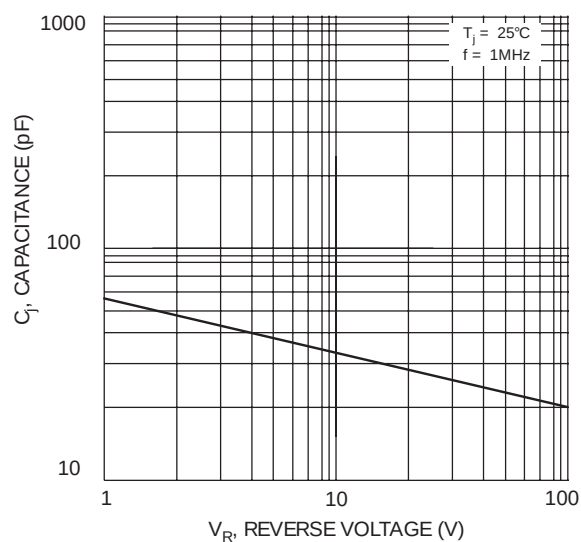
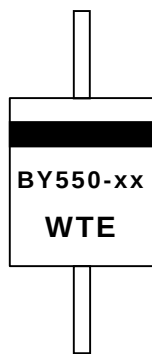


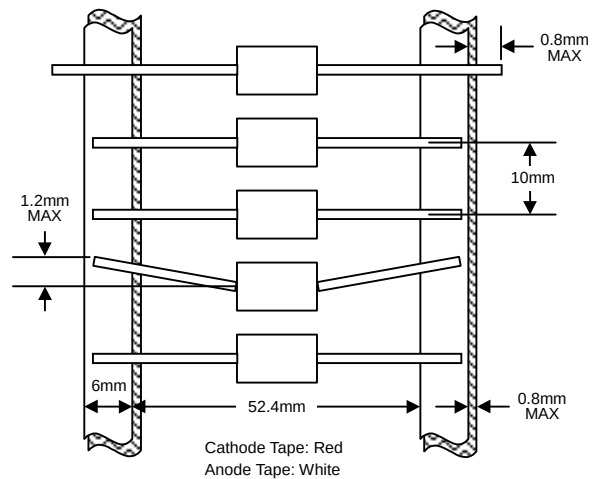
Fig. 4 Typical Junction Capacitance

## MARKING INFORMATION



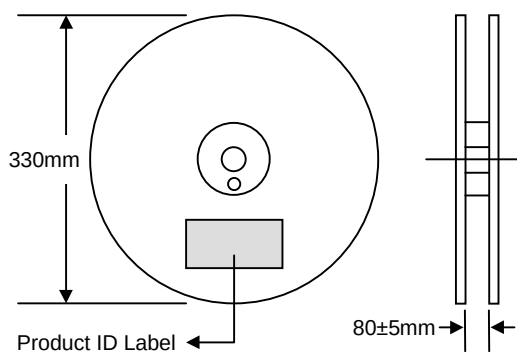
Cathode = Polarity Band  
 BY550-xx = Device Number  
 xx = 50, 100, 200, 400, 600, 800 or 1000  
 WTE = Manufacturer's Logo

## TAPING SPECIFICATIONS

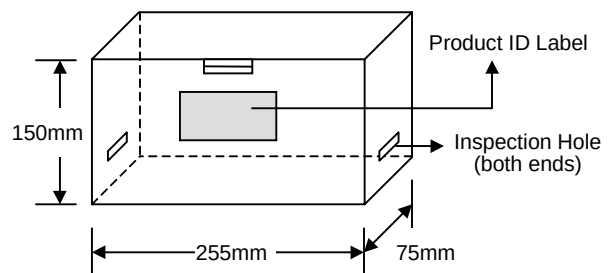


## PACKAGING INFORMATION

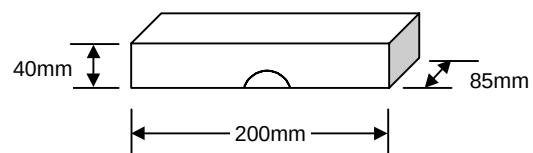
### TAPE & REEL



### 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.

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

*We power your everyday.*



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
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- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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