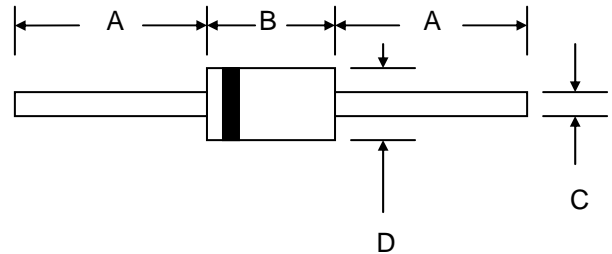


### Features

- 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	BY255	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	1300	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	910	V
Average Rectified Output Current (Note 1) @ $T_A = 75^\circ\text{C}$	$I_O$	3.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	200	A
Forward Voltage @ $I_F = 3.0\text{A}$	$V_{FM}$	1.0	V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	5.0 100	$\mu\text{A}$
Typical Junction Capacitance (Note 2)	$C_J$	30	pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{JA}$	20	$^\circ\text{C/W}$
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.

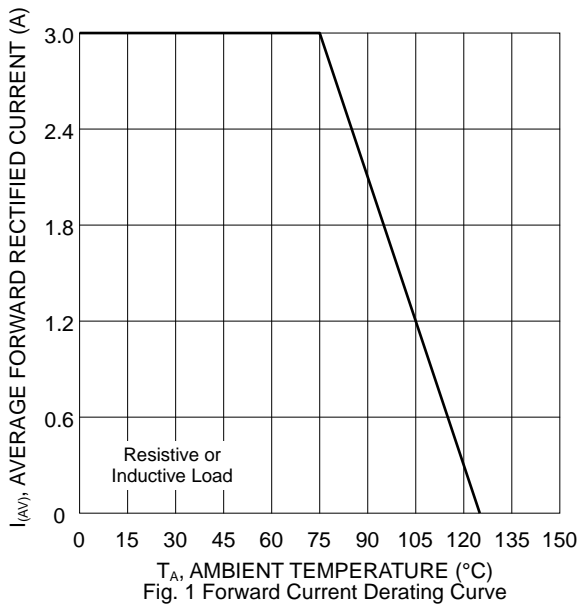


Fig. 1 Forward Current Derating Curve

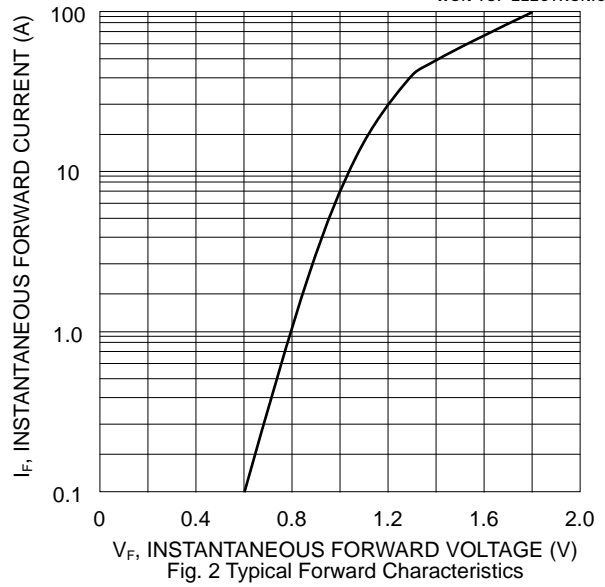


Fig. 2 Typical Forward Characteristics

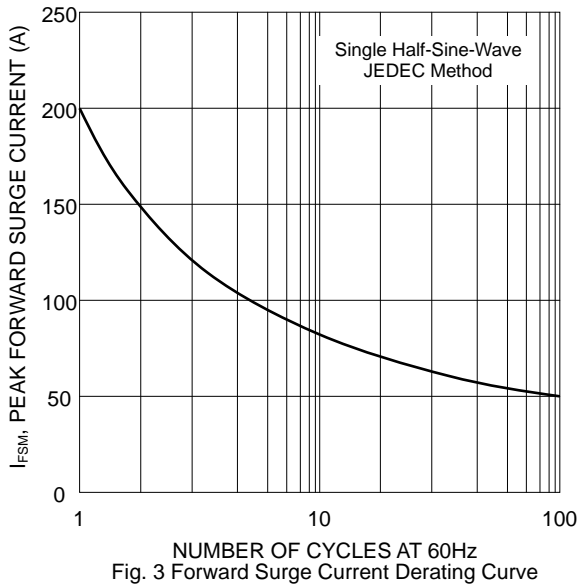


Fig. 3 Forward Surge Current Derating Curve

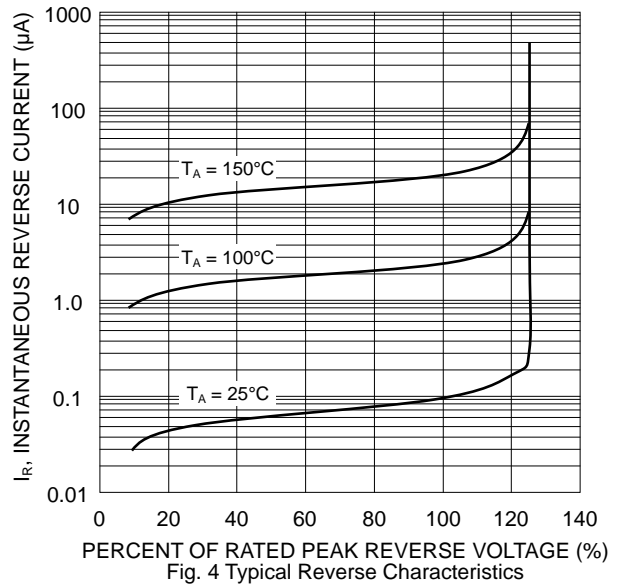


Fig. 4 Typical Reverse Characteristics

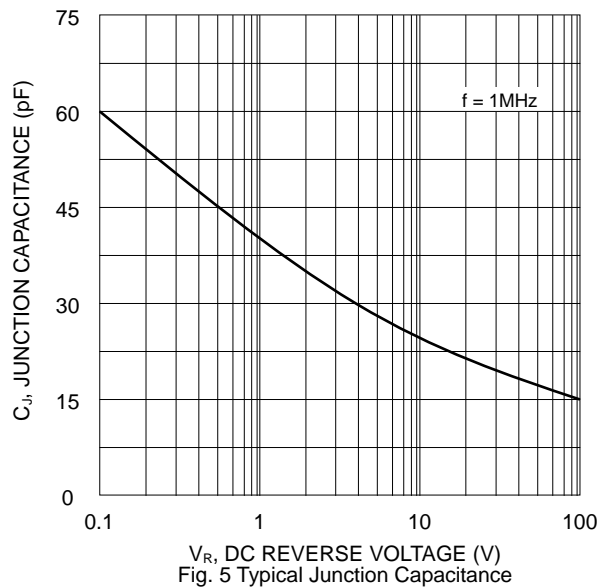
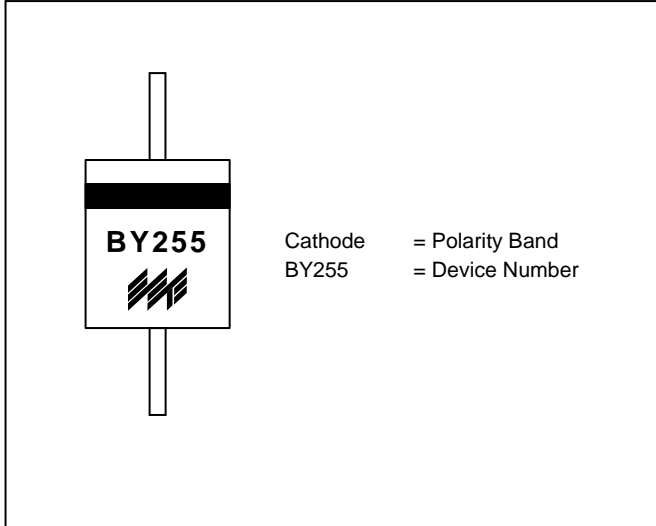
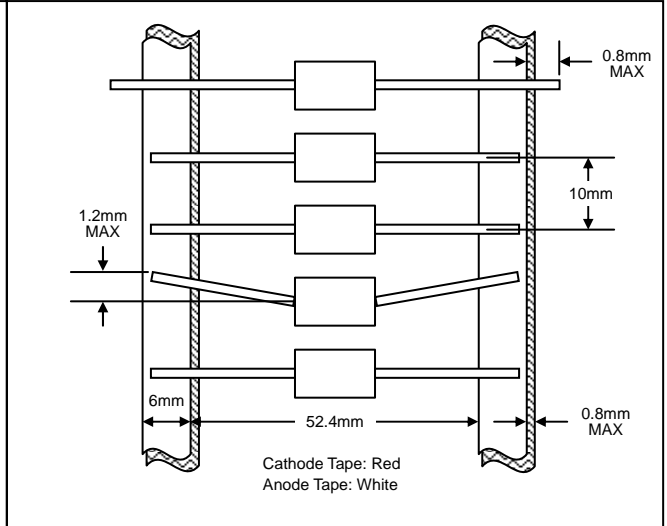


Fig. 5 Typical Junction Capacitance

**MARKING INFORMATION**

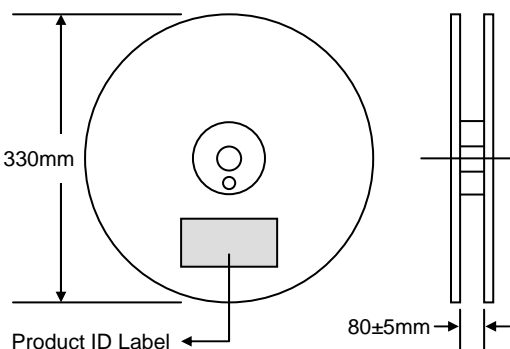


**TAPING SPECIFICATIONS**



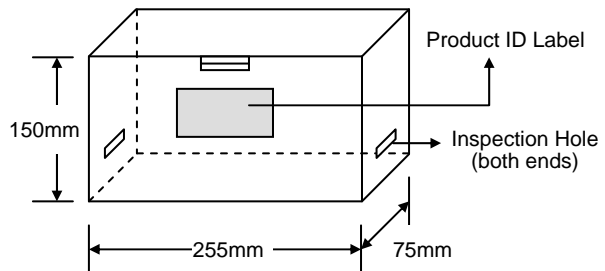
**PACKAGING INFORMATION**

**TAPE & REEL**



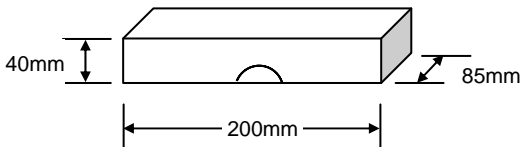
330mm  
Product ID Label  
80±5mm

**TAPE & BOX**



150mm  
Product ID Label  
Inspection Hole (both ends)  
255mm  
75mm

**BULK**



40mm  
200mm  
85mm

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
BY255-T3	DO-201AD	1200/Tape & Reel
<b>BY255-TB</b>	DO-201AD	1200/Tape & Box
BY255	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, BY255-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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