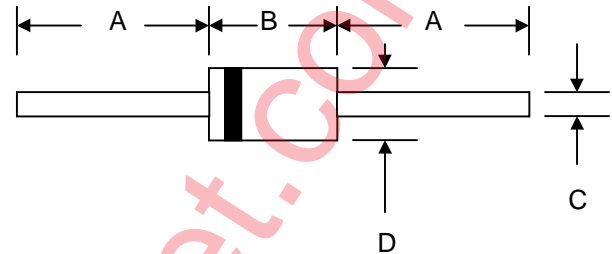


Features

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



Mechanical Data

- Case: DO-15, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.40 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-15		
Dim	Min	Max
A	25.4	—
B	5.50	7.62
C	0.71	0.864
D	2.60	3.60
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	1N5391	1N5392	1N5393	1N5395	1N5397	1N5398	1N5399	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)	I_O	1.5							A
		@ $T_A = 75^\circ\text{C}$							
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Forward Voltage	V_{FM}	1.0							V
		@ $I_F = 1.5\text{A}$							
Peak Reverse Current	I_{RM}	5.0							μA
		@ $T_A = 25^\circ\text{C}$							
At Rated DC Blocking Voltage	I_{RM}	50							μA
		@ $T_A = 100^\circ\text{C}$							
Typical Junction Capacitance (Note 2)	C_j	30							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	45							$^\circ\text{C/W}$
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.

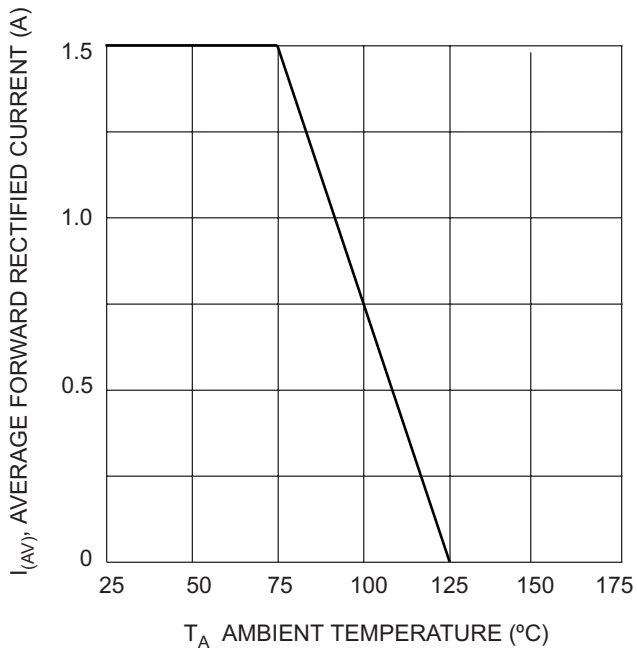


Fig. 1, Forward Current Derating Curve

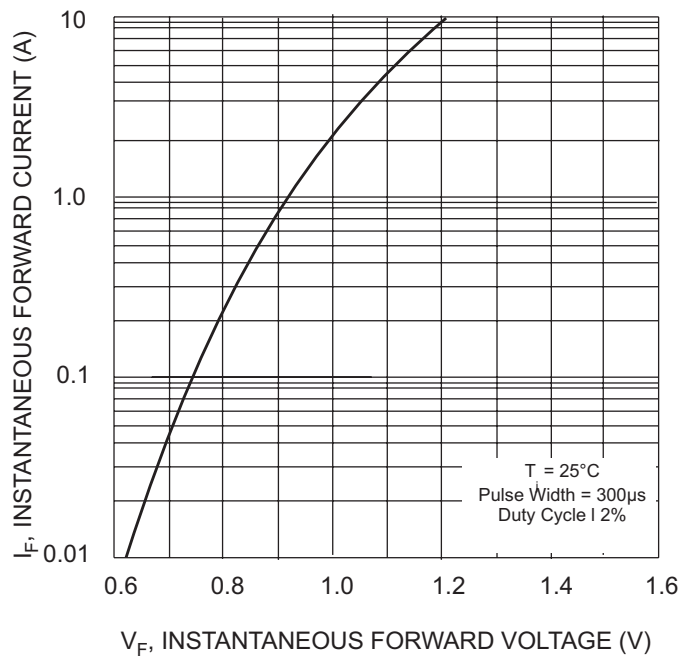


Fig. 2 Typical Forward Characteristics

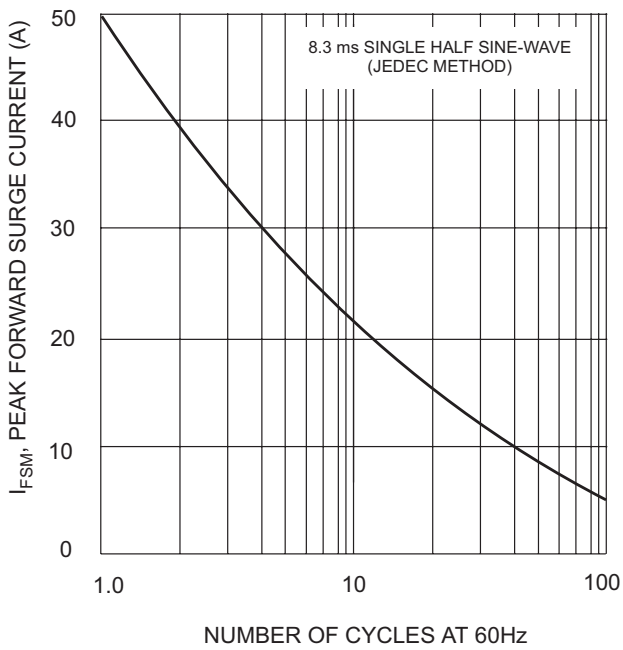


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

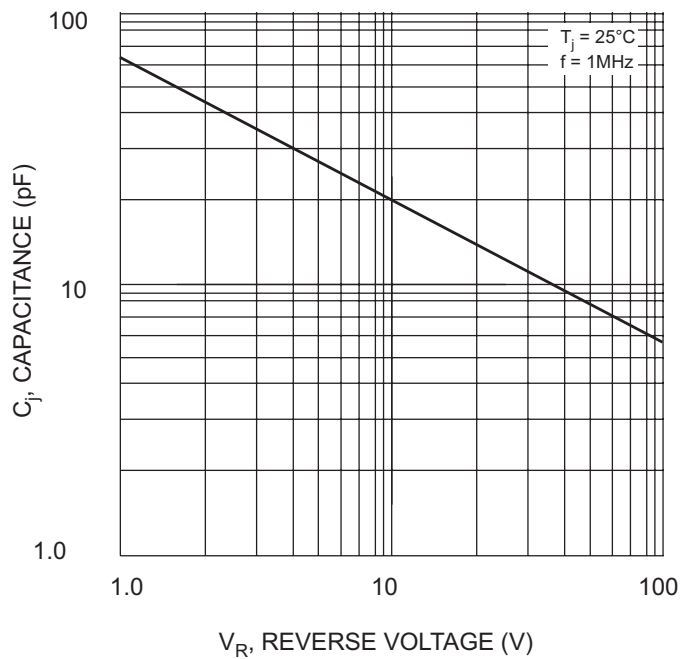
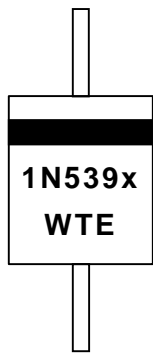


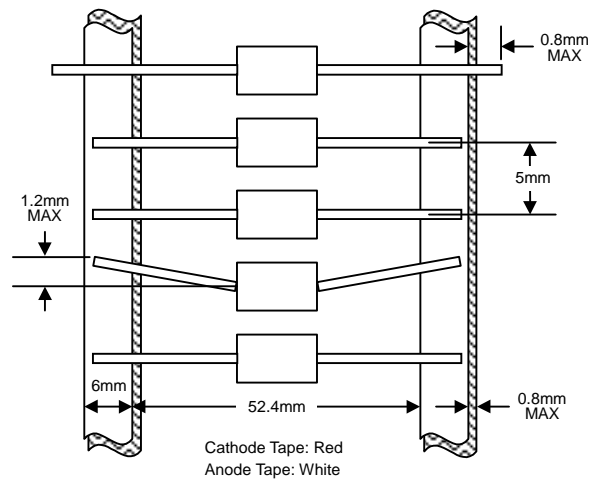
Fig. 4 Typical Junction Capacitance

MARKING INFORMATION

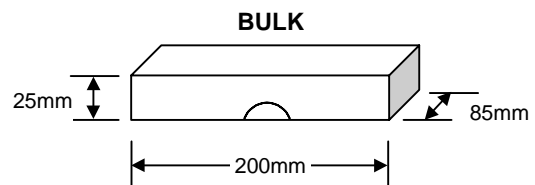
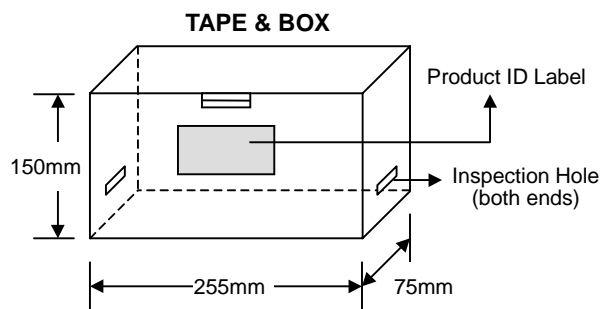
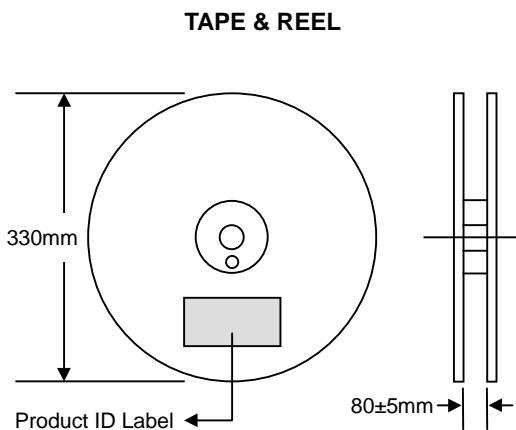


Cathode = Polarity Band
 1N539x = Device Number
 x = 1, 2, 3, 5, 7, 8 or 9
 WTE = Manufacturer's Logo

TAPING SPECIFICATIONS



PACKAGING INFORMATION



Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
TAPE & REEL	330	4,000	370 x 370 x 420	20,000	12.0
TAPE & BOX	255 x 75 x 150	3,000	400 x 273 x 415	30,000	15.0
BULK	200 x 85 x 25	1,000	459 x 214 x 256	40,000	17.5

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
1N5391-T3	DO-15	4000/Tape & Reel
1N5391-TB	DO-15	3000/Tape & Box
1N5391	DO-15	1000 Units/Box
1N5392-T3	DO-15	4000/Tape & Reel
1N5392-TB	DO-15	3000/Tape & Box
1N5392	DO-15	1000 Units/Box
1N5393-T3	DO-15	4000/Tape & Reel
1N5393-TB	DO-15	3000/Tape & Box
1N5393	DO-15	1000 Units/Box
1N5395-T3	DO-15	4000/Tape & Reel
1N5395-TB	DO-15	3000/Tape & Box
1N5395	DO-15	1000 Units/Box
1N5397-T3	DO-15	4000/Tape & Reel
1N5397-TB	DO-15	3000/Tape & Box
1N5397	DO-15	1000 Units/Box
1N5398-T3	DO-15	4000/Tape & Reel
1N5398-TB	DO-15	3000/Tape & Box
1N5398	DO-15	1000 Units/Box
1N5399-T3	DO-15	4000/Tape & Reel
1N5399-TB	DO-15	3000/Tape & Box
1N5399	DO-15	1000 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, 1N5391-TB-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.