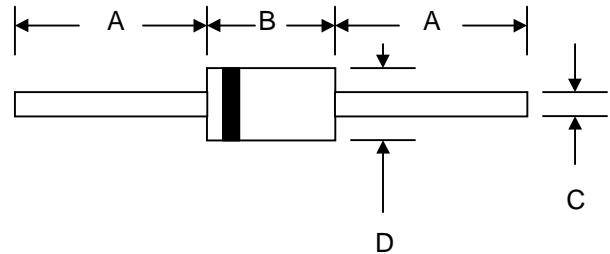


### Features

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



### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.35 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

DO-41		
Dim	Min	Max
A	25.4	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
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	BY133	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) @ $T_A = 75^\circ\text{C}$	$I_o$	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30	A
Forward Voltage @ $I_F = 1.0\text{A}$	$V_{FM}$	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 50	$\mu\text{A}$
Typical Junction Capacitance (Note 2)	$C_j$	15	pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	50	K/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.

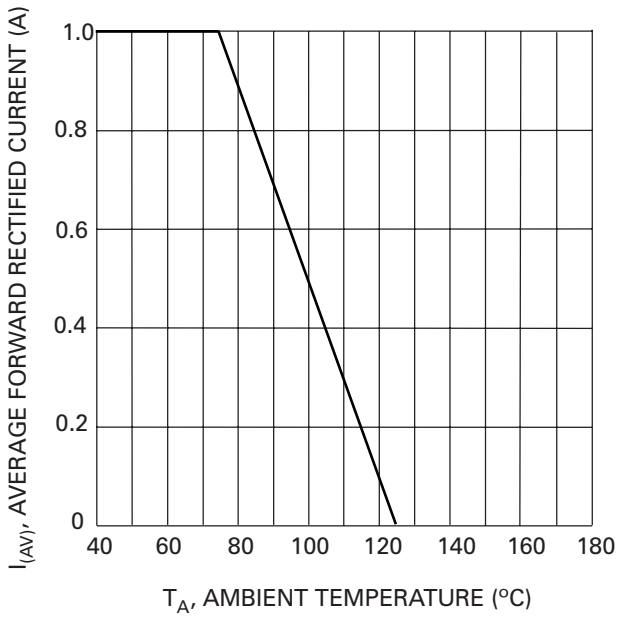


Fig. 1 Forward Current Derating Curve

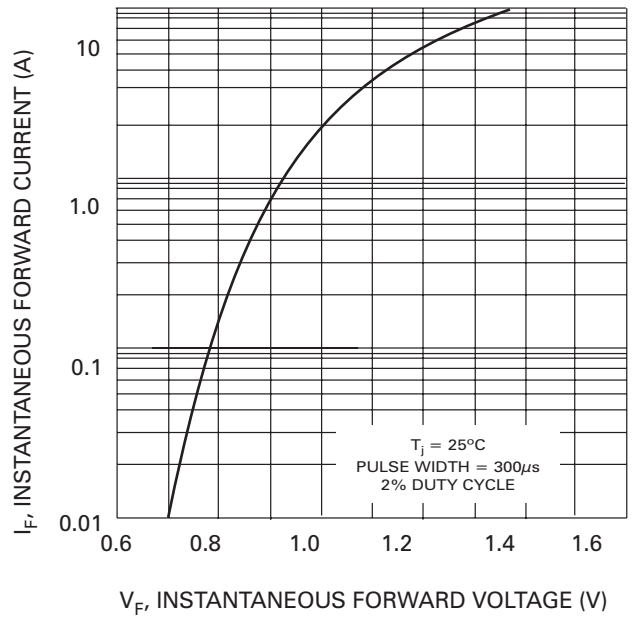


Fig. 2 Typical Forward Characteristics

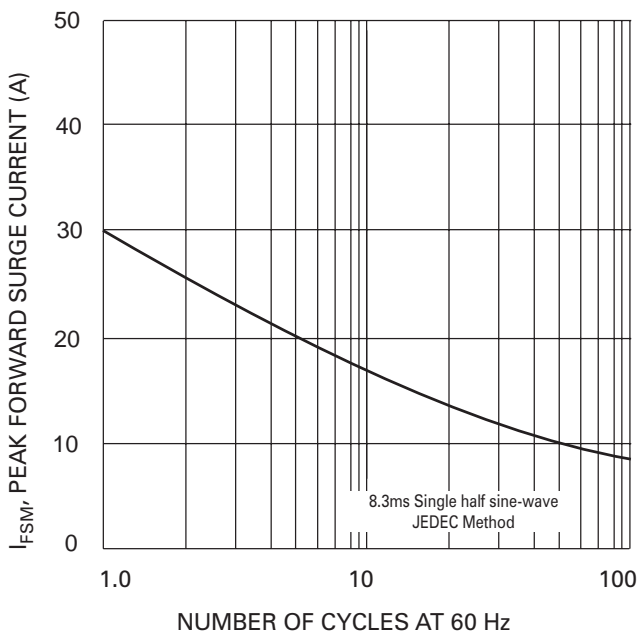


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

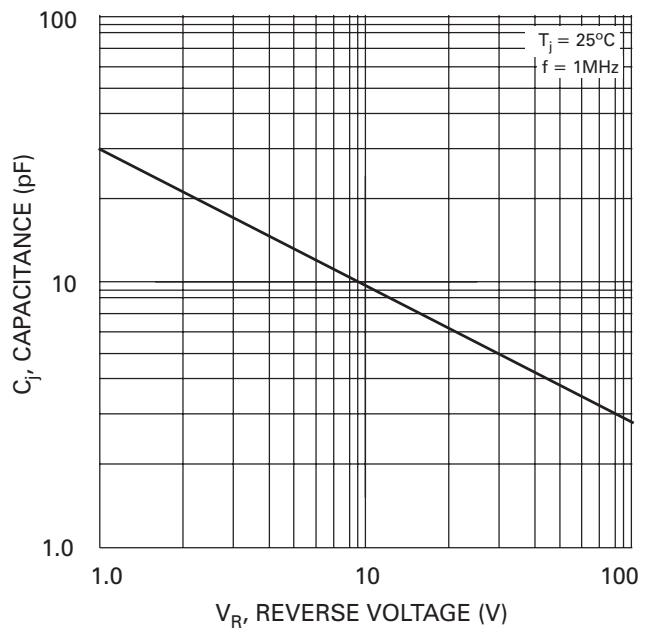


Fig. 4 Typical Junction Capacitance

## ORDERING INFORMATION

Product No.◆	Package Type	Shipping Quantity
BY133-T3	DO-41	5000/Tape & Reel
<b>BY133-TB</b>	DO-41	5000/Tape & Box
BY133	DO-41	1000 Units/Box

Products listed in **bold** are WTE **Preferred** devices.

◆T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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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