

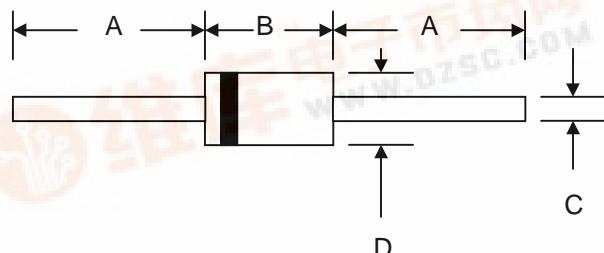


1N4933 – 1N4937

1.0A FAST RECOVERY RECTIFIER

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: 0.34 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 $\text{@T}_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	1N4933	1N4934	1N4935	1N4936	1N4937	Unit
Peak Repetitive Reverse Voltage	V_{RRM}						
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	V
DC Blocking Voltage	V_R						
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	V
Average Rectified Output Current (Note 1)	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 $\text{@} I_F = 1.0\text{A}$	V_{FM}			1.2			V
Peak Reverse Current $\text{@} T_A = 25^\circ\text{C}$	I_{RM}			5.0			μA
At Rated DC Blocking Voltage $\text{@} T_A = 100^\circ\text{C}$				100			
Reverse Recovery Time (Note 2)	t_{rr}			200			nS
Typical Junction Capacitance (Note 3)	C_j			15			pF
Operating Temperature Range	T_j			-65 to +125			$^\circ\text{C}$
Storage Temperature Range	T_{STG}			-65 to +150			$^\circ\text{C}$

*Glass passivated forms are available upon request

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$. See figure 5.

3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



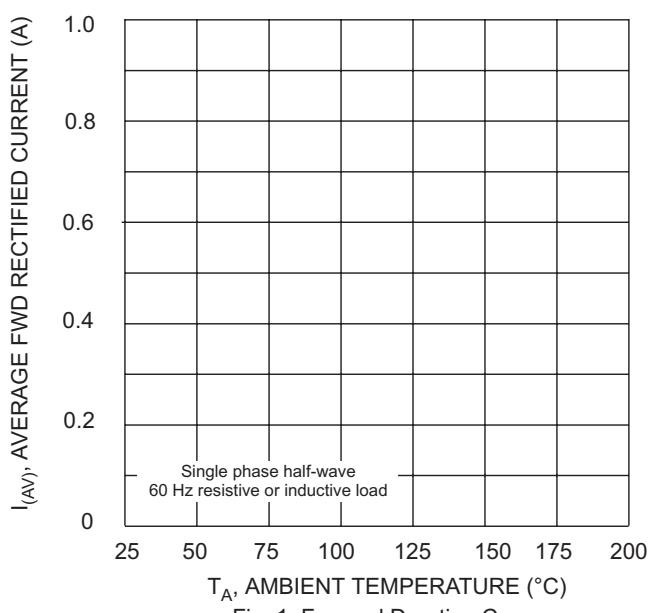


Fig. 1 Forward Derating Curve

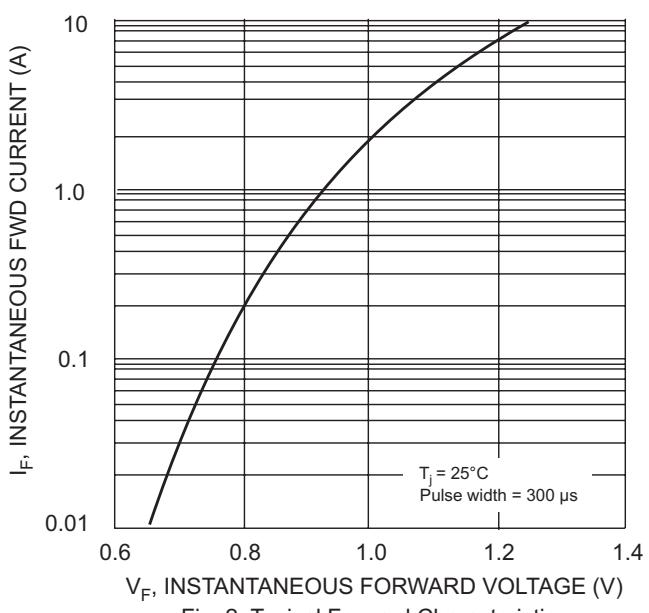


Fig. 2 Typical Forward Characteristics

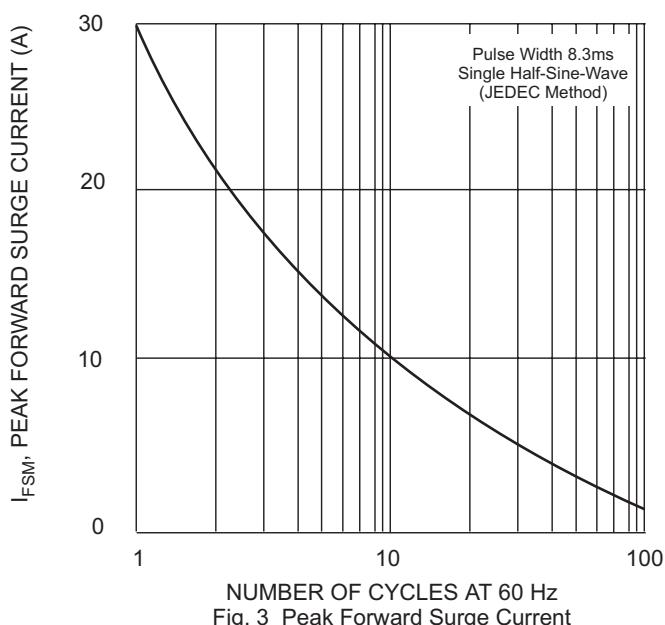


Fig. 3 Peak Forward Surge Current

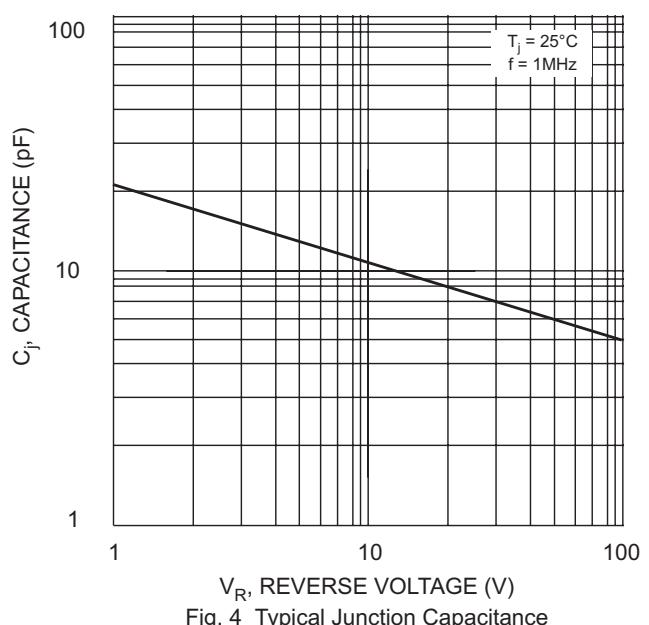
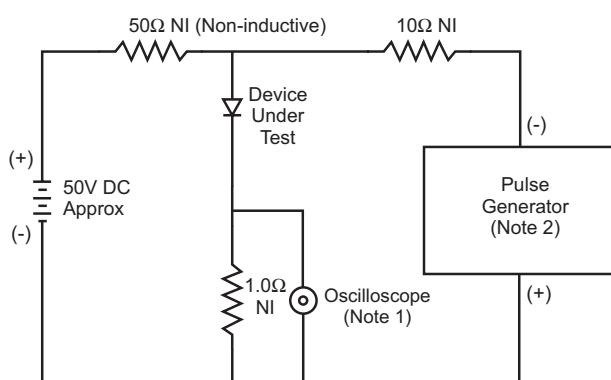


Fig. 4 Typical Junction Capacitance



Notes:

1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
2. Rise Time = 10ns max. Input Impedance = 50Ω.

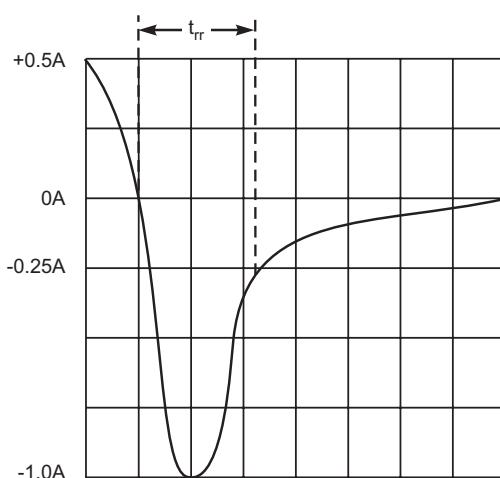


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

ORDERING INFORMATION

Product No.♦	Package Type	Shipping Quantity
1N4933-T3	DO-41	5000/Tape & Reel
1N4933-TB	DO-41	5000/Tape & Box
1N4933	DO-41	1000 Units/Box
1N4934-T3	DO-41	5000/Tape & Reel
1N4934-TB	DO-41	5000/Tape & Box
1N4934	DO-41	1000 Units/Box
1N4935-T3	DO-41	5000/Tape & Reel
1N4935-TB	DO-41	5000/Tape & Box
1N4935	DO-41	1000 Units/Box
1N4936-T3	DO-41	5000/Tape & Reel
1N4936-TB	DO-41	5000/Tape & Box
1N4936	DO-41	1000 Units/Box
1N4937-T3	DO-41	5000/Tape & Reel
1N4937-TB	DO-41	5000/Tape & Box
1N4937	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.

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.