

# 1N4933 - 1N4937

1.0A FAST RECOVERY RECTIFIER

### Features

- **Diffused Junction** .
- Fast Switching for High Efficiency •
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Low Reverse Leakage Current
- Lead Free Finish, RoHS Compliant (Note 4)

# **Mechanical Data**

- Case: DO-41 •
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020D
- Terminals: Finish Bright Tin. Plated Leads Solderable per MIL-STD-202, Method 208 @3:
- Polarity: Cathode Band
- Mounting Position: Any
- Ordering Information: See Page 2
- Marking: Type Number
- 0.35 grams (approximate)

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Dim	DO-41 Plastic			
חווס	Min	Max		
Α	25.40	_		
В	4.06	5.21		
С	0.71	0.864		
D	2.00	2.72		
All Dimensions in mm				

#### Maximum Ratings and Electrical Characteristics $@T_A = 25^{\circ}C$ unless otherwise specified

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

Characteristic	Symbol	1N4933	1N4934	1N4935	1N4936	1N4937	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage (Note 5)	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	V
Average Rectified Output Current (Note 1) @ $T_A = 75^{\circ}C$	Ιο	1.0				А	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	30				А	
Forward Voltage Drop @ I <sub>F</sub> = 1.0A	V <sub>FM</sub>	1.2				V	
Peak Reverse Current @ $T_A = 25^{\circ}C$ at Rated DC Blocking Voltage (Note 5) @ $T_A = 100^{\circ}C$	I <sub>RM</sub>	5.0 100				μΑ	
Reverse Recovery Time (Note 3)	t <sub>rr</sub>	200				ns	
Typical Total Capacitance (Note 2)	CT	15				pF	
Typical Thermal Resistance Junction to Ambient	$R_{ heta}JA$	100				°C/W	
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150				°C	

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

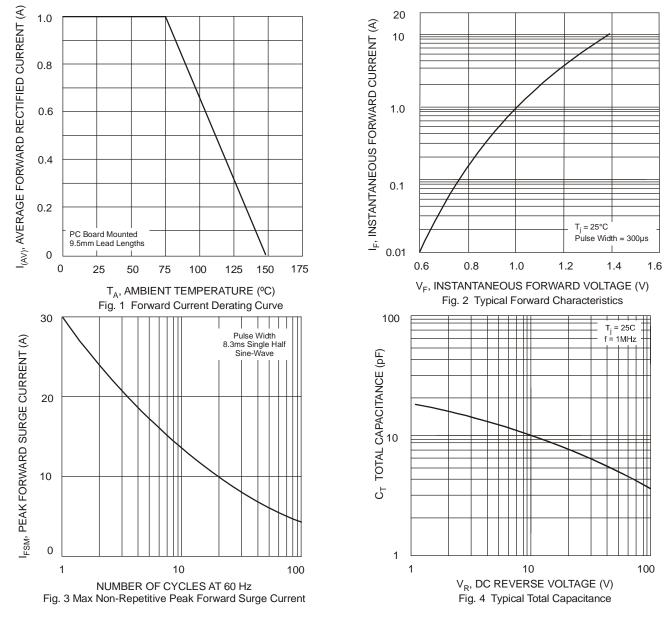
Measured at 1.0MHz and applied reverse voltage of 4.0V DC. 2.

3.

Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1A, I<sub>rr</sub> = 0.25A. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes. Short duration pulse test used to minimize self-heating effect. 4.

5.





# Ordering Information (Note 6)

Device	Packaging	Shipping
1N4933-T	DO-41	5K/Tape & Reel, 13-inch
1N4934-T	DO-41	5K/Tape & Reel, 13-inch
1N4935-T	DO-41	5K/Tape & Reel, 13-inch
1N4936-T	DO-41	5K/Tape & Reel, 13-inch
1N4937-T	DO-41	5K/Tape & Reel, 13-inch

Notes: 6. For packaging details, visit our website at http://www.diodes.com/datasheets/ap02008.pdf.

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