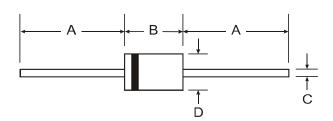


# <u>1N4933 - 1N4937</u>

#### 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
- 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)

Dim	DO-41 Plastic				
ווווט	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**

@TA = 25°C unless otherwise specified

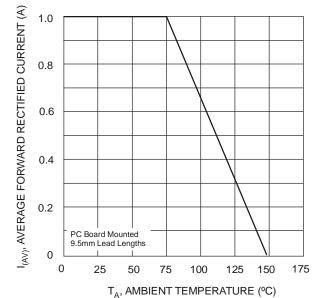
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

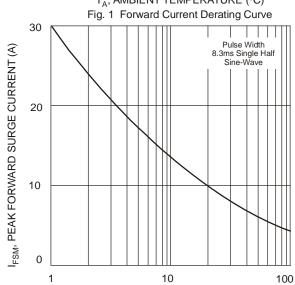
Characteristic	Symbol	1N4933	1N4934	1N4935	1N4936	1N4937	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage (Note 5)	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	V
Average Rectified Output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

Notes:

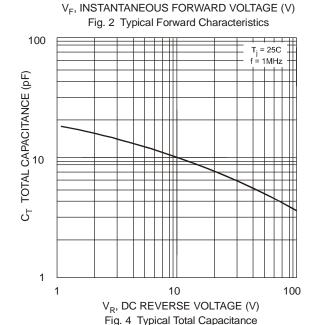
- Leads maintained at ambient temperature at a distance of 9.5mm from the case.
- Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- 3.
- Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1A, I<sub>Irr</sub> = 0.25A. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes. Short duration pulse test used to minimize self-heating effect.







NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Peak Forward Surge Current



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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