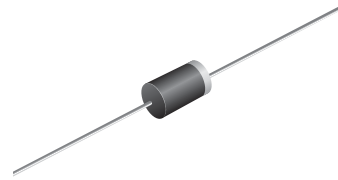


# Plastic Fast Recovery Rectifier

## 1N4933 THRU 1N4937

Voltage Range 50 to 600 V

Current 1.0 Ampere

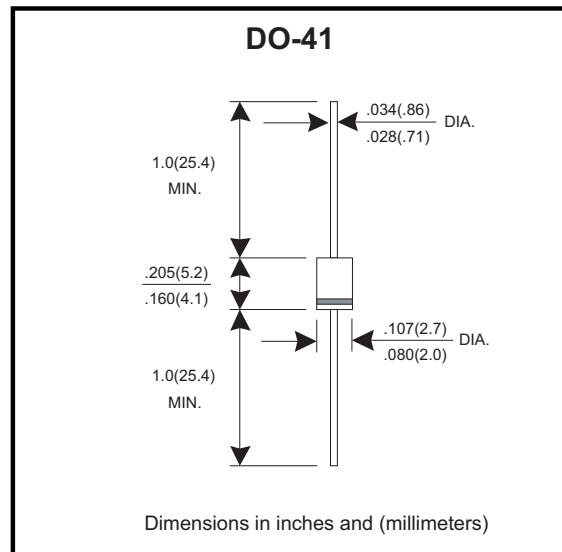


### Features

- Fast switching for high efficiency
- Low forward voltage drop
- High current capability
- Low reverse leakage current
- High surge current capability

### Mechanical Data

- Case: Molded plastic DO-41
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-202 method 208
- Polarity: Color band denotes cathode
- Mounting position: Any
- Weight: 0.036gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

	SYMBOL	1N4933	1N4934	1N4935	1N4936	1N4937	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	V
Maximum Average Forward Rectified Current T <sub>L</sub> =55°C	I <sub>F(AV)</sub>	1.0					A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30					A
Maximum Instantaneous Forward Voltage @ 1.0 A	V <sub>F</sub>	1.2					V
Maximum DC Reverse Current @T <sub>J</sub> =25°C At Rated DC Blocking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	5.0 250					uA uA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	130					nS
Typical junction Capacitance (Note 2)	C <sub>J</sub>	15					pF
Typical Thermal Resistance (Note 3)	R <sub>θJA</sub>	75					°CW
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 125					°C

NOTES : (1) Reverse recovery test conditions I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A.  
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.  
 (3) Thermal Resistance junction to lead.

FIG.1 - FORWARD CURRENT DERATING CURVE

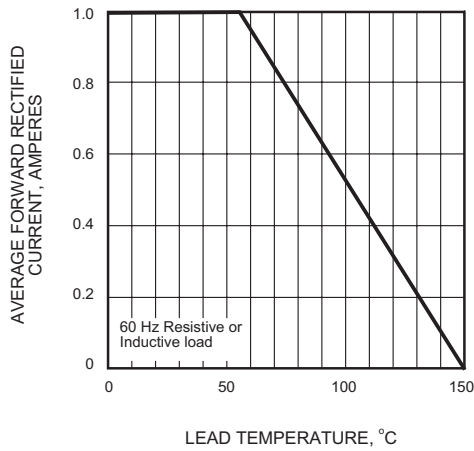


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

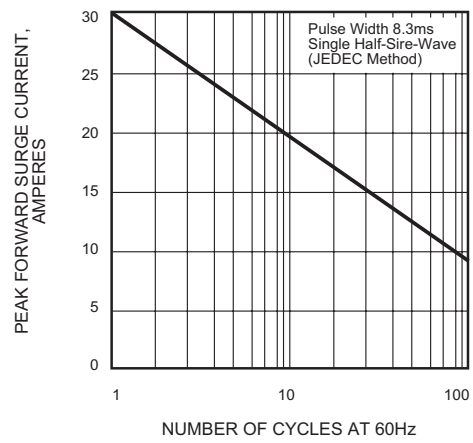


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

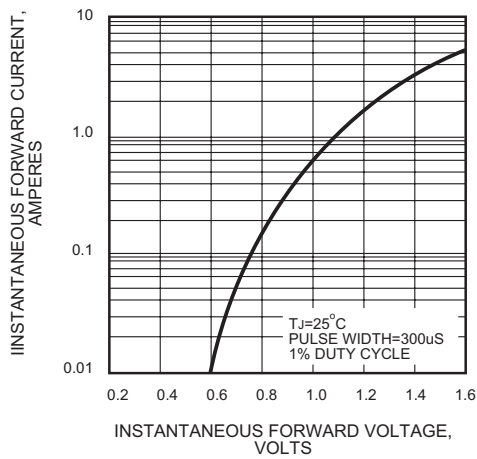


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

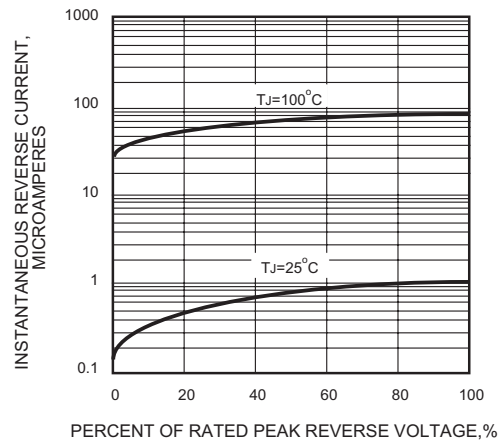


FIG.5 - TYPICAL JUNCTION CAPACITANCE

