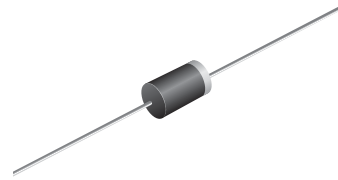


# Plastic Fast Recovery Rectifier

## 1N4933 THRU 1N4937

Voltage Range 50 to 600 V

Current 1.0 Ampere

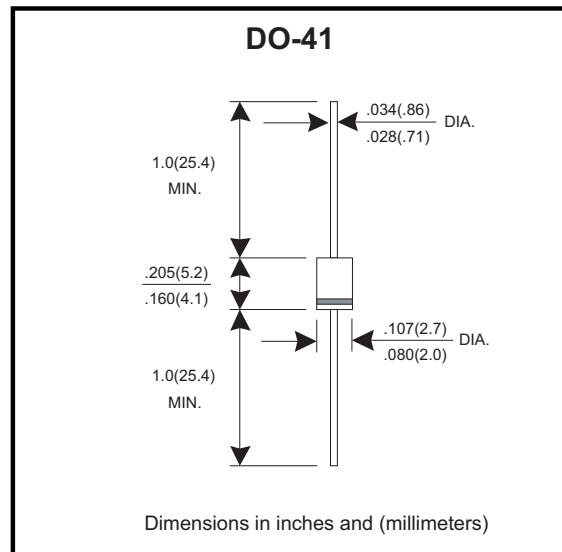


### Features

- 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	VRRM	50	100	200	400	600	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	V
Maximum Average Forward Rectified Current $T_L=55^\circ\text{C}$	IF(AV)	1.0					A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	30					A
Maximum Instantaneous Forward Voltage @ 1.0 A	VF	1.2					V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J=100^\circ\text{C}$	IR	5.0 250					$\mu\text{A}$ $\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	Trr	130					nS
Typical junction Capacitance (Note 2)	CJ	15					pF
Typical Thermal Resistance (Note 3)	R $\theta$ JA	75					$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to + 125					$^\circ\text{C}$

NOTES : (1) Reverse recovery test conditions  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$ .  
 (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

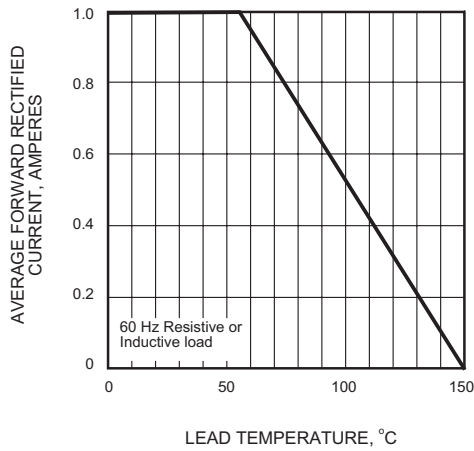


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

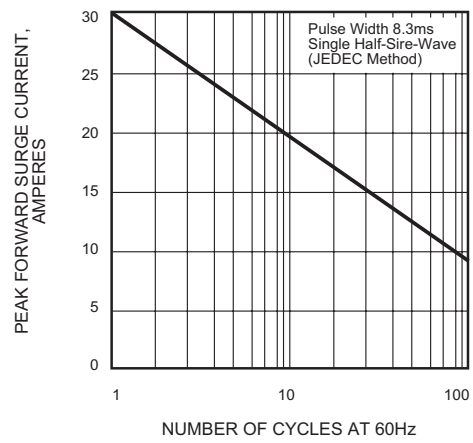


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

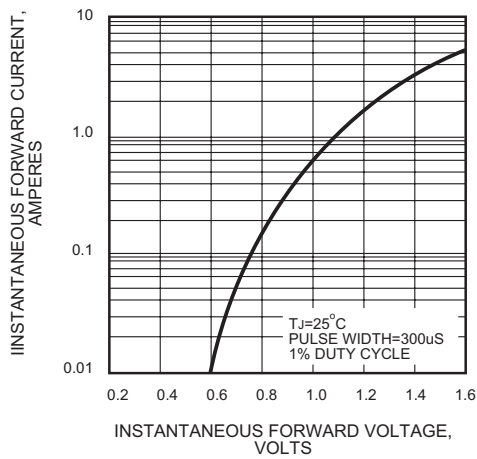


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

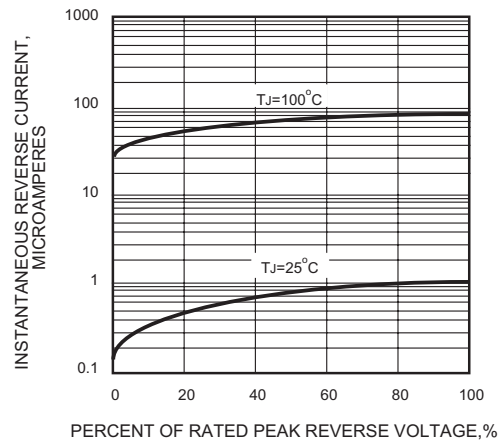


FIG.5 - TYPICAL JUNCTION CAPACITANCE

