

## FAST RECOVERY RECTIFIERS

REVERSE VOLTAGE - **50 to 600** Volts  
FORWARD CURRENT - **1.0** Ampere

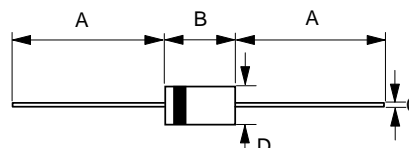
### FEATURES

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

### MECHANICAL DATA

- Case : JEDEC DO-41 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounces, 0.34 grams
- Mounting position : Any

### DO-41



DO-41		
Dim.	Min.	Max.
A	25.4	-
B	4.20	5.20
C	0.70 $\phi$	0.90 $\phi$
D	2.00 $\phi$	2.70 $\phi$
All Dimensions in millimeter		

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	1N4933	1N4934	1N4935	1N4936	1N4937	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	V
Maximum Average Forward Rectified Current @ $T_A = 75^\circ C$	$I_{(AV)}$	1.0					A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	$I_{FSM}$	30					A
Maximum forward Voltage at 1.0A DC	$V_F$	1.3					V
Maximum DC Reverse Current @ $T_J = 25^\circ C$ at Rated DC Blocking Voltage @ $T_J = 100^\circ C$	$I_R$	5.0 100					uA uA
Maximum Reverse Recovery Time (Note 1)	$T_{RR}$	200					ns
Maximum Reverse Recovery Time (Note 2)	$T_{RR}$	130					ns
Typical Junction Capacitance (Note 3)	$C_J$	15					pF
Typical Thermal Resistance (Note 4)	$R_{\theta JA}$	50					$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to +150					$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150					$^\circ C$

- NOTES : 1.Measured with  $I_F=1.0A, V_R=30V, di/dt=50A/us$ .  
2.Measured with  $I_F=0.5A, I_R=1A, I_{RR}=0.25A$ .  
3.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
4.Thermal Resistance Junction to Ambient.

## RATING AND CHARACTERISTIC CURVES

FIG. 1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

