

FAST RECOVERY RECTIFIERS

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

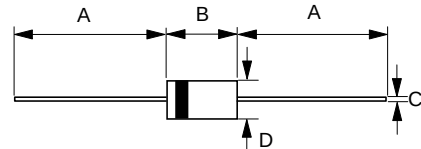
FEATURES

- 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 A-405 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.008 ounces, 0.22 grams
- Mounting position : Any

A-405



A-405		
Dim.	Min.	Max.
A	25.4	-
B	4.10	5.20
C	0.53 $\varnothing$	0.64 $\varnothing$
D	2.00 $\varnothing$	2.70 $\varnothing$
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	1N4933L	1N4934L	1N4935L	1N4936L	1N4937L	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 @ $T_A = 75^\circ\text{C}$	$I_{(AV)}$	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	1.2					V
Maximum DC Reverse Current @ $T_J = 25^\circ\text{C}$	I_R	5.0					μA
at Rated DC Blocking Voltage @ $T_J = 100^\circ\text{C}$		100					μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	200					ns
Maximum Reverse Recovery Time (Note 1)	T_{RR}	130					ns
Typical Junction Capacitance (Note 2)	C_J	15					pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	50					$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +125					$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150					$^\circ\text{C}$

NOTES : 1. Measured with $I_F = 1.0\text{A}$, $V_R = 30\text{V}$, $di/dt = 50\text{A}/\mu\text{s}$.

2. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$.

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

4. Thermal Resistance Junction to Ambient.

REV. 2, 01-Dec-2000, KDBB01

FIG.1 - FORWARD CURRENT DERATING CURVE

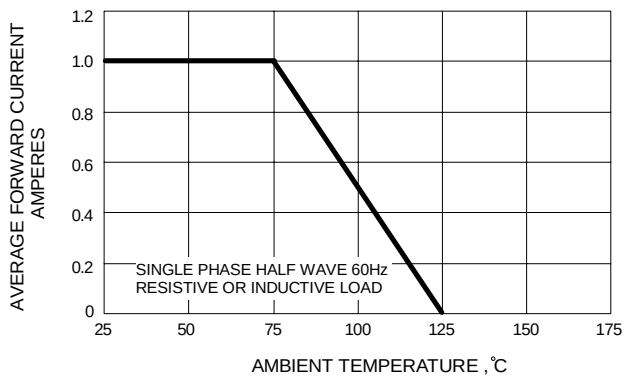


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

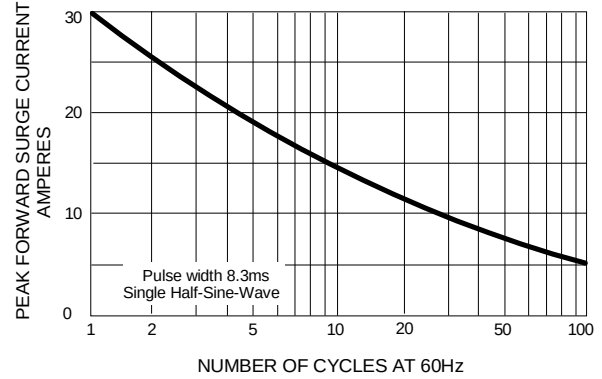


FIG.3 - TYPICAL JUNCTION CAPACITANCE

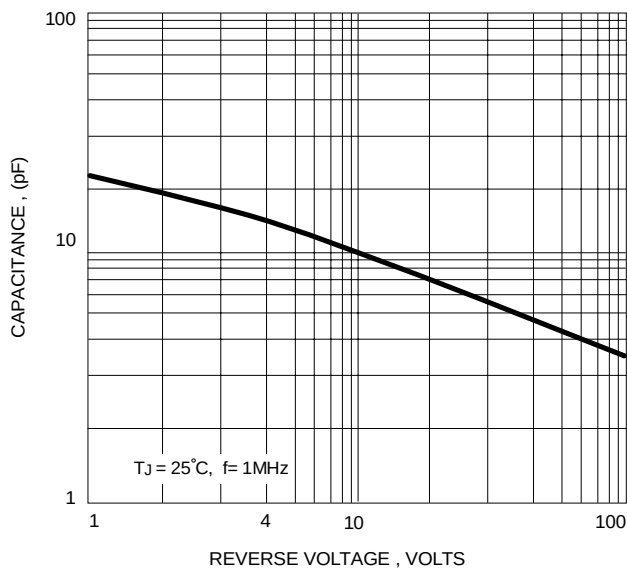


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

