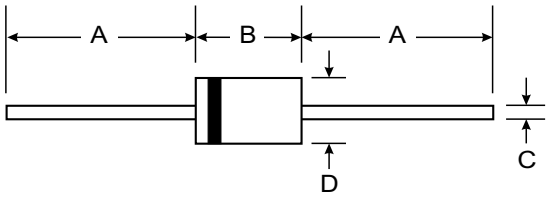
1N4933/L - 1N4937/L

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
- Plastic Material: UL Flammability Classification Rating 94V-0



Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: DO-41 0.35 grams (approx)
- A-405 0.20 grams (approx)
- Mounting Position: Any
- Marking: Type Number

	DO-41 Plastic		A-405	
Dim	**Min**	**Max**	**Min**	**Max**
A	25.40	—	25.40	——
B	4.06	5.21	4.10	5.20
C	0.71	0.864	0.53	0.64
D	2.00	2.72	2.00	2.70
All Dimensions in mm				

"L" Suffix Designates A-405 Package
No Suffix Designates DO-41 Package

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

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

Characteristic	Symbol	1N4933/L	1N4934/L	1N4935/L	1N4936/L	1N4937/L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	V
Average Rectified Output Current (Note 1) @ T_A = 75°C	I_O	1.0					A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					A
Forward Voltage Drop @ I_F = 1.0A	V_{FM}	1.2					V
Peak Reverse Current @T_A = 25°C at Rated DC Blocking Voltage @ T_A = 100°C	I_{RM}	5.0 100					μA
Reverse Recovery Time (Note 3)	t_{rr}	200					ns
Typical Junction Capacitance (Note 2)	C_j	15					pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100					K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150					°C

Notes: 1.Leads maintained at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Measured with I_F = 0.5A, I_R = 1A, I_{rr} = 0.25A.

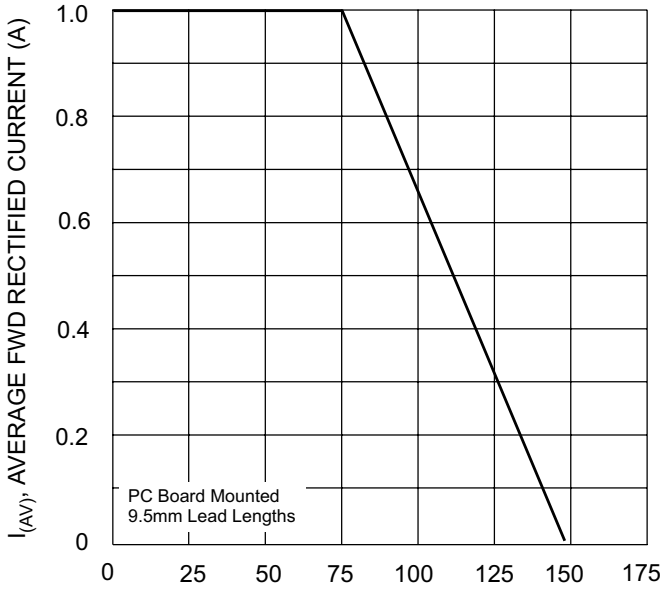


Fig. 1 Forward Current Derating Curves

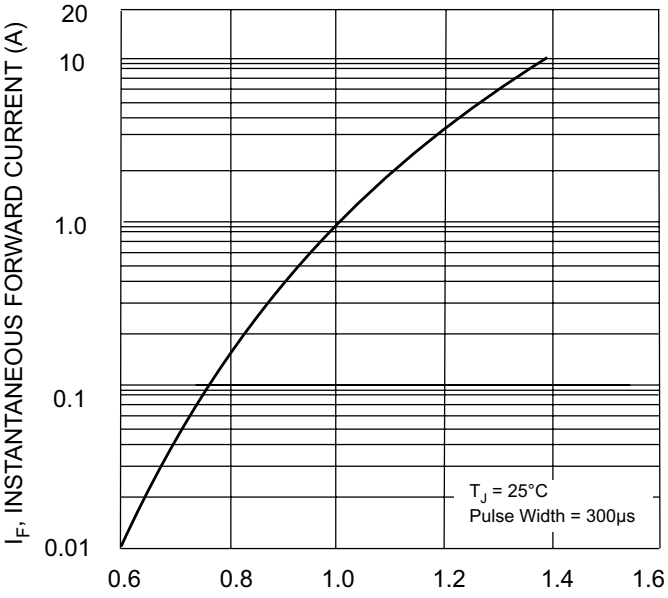


Fig. 2 Typical Forward Characteristics

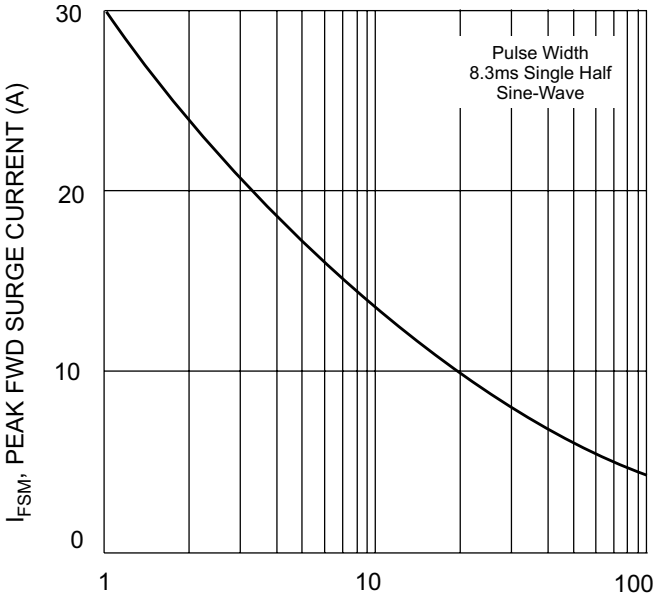


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

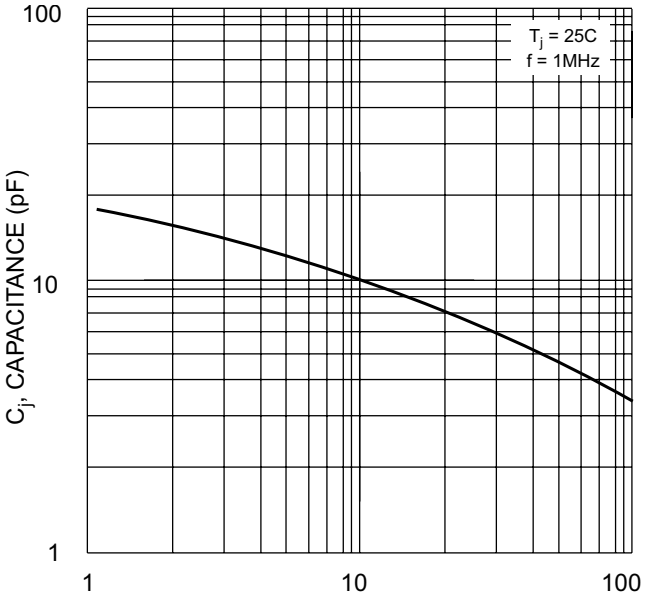


Fig. 4 Typical Junction Capacitance