

1N4933S THRU 1N4937S

FAST RECOVERY RECTIFIERS

Reverse Voltage – 50 to 600 V

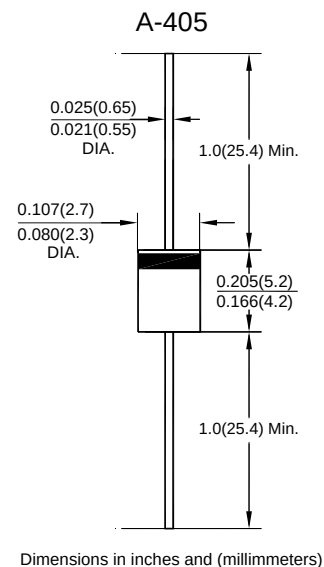
Forward Current – 1 A

Features

- Low reverse leakage
- High forward surge current capability
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique

Mechanical Data

- **Case:** A-405, Molded plastic.
- **Terminals:** Plated Axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any



Dimensions in inches and (millimeters)

Absolute Maximum Ratings and Characteristics

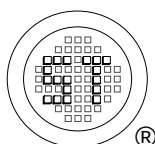
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	1N4933S	1N4934S	1N4935S	1N4936S	1N4937S	Units
Maximum Repetitive 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 0.375" (9.5 mm) lead lengths at $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	1					A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30					A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.2					V
Maximum DC Reverse Current at $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_A = 100^\circ\text{C}$	I_R	5 50					μA
Maximum Reverse Recovery Time ¹⁾	t_{rr}	200					ns
Typical Junction Capacitance ²⁾	C_J	15					pF
Typical Thermal Resistance ³⁾	$R_{\theta JA}$	50					$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_S	- 65 to + 150					$^\circ\text{C}$

¹⁾ Reverse recovery condition $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V D.C.

²⁾ Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B mounted.



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ISO/TS 16949 : 2002
Certificate No. 05103



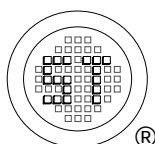
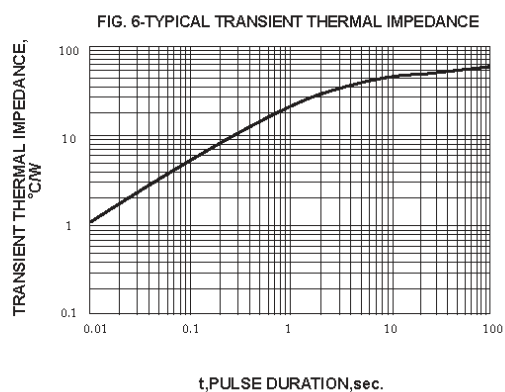
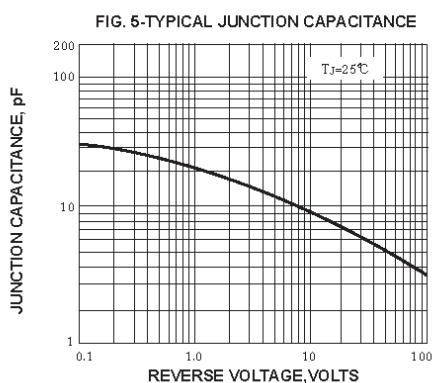
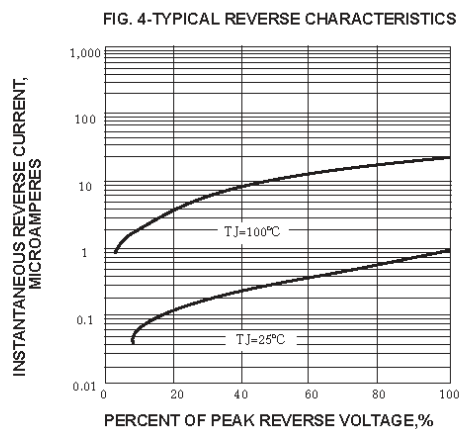
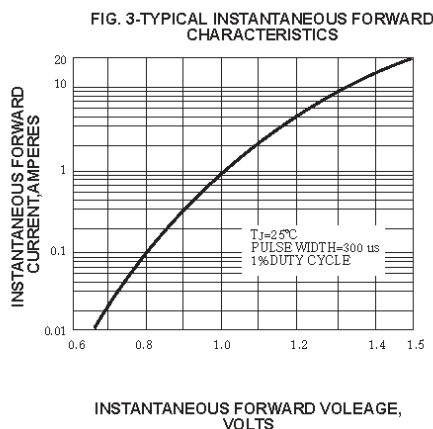
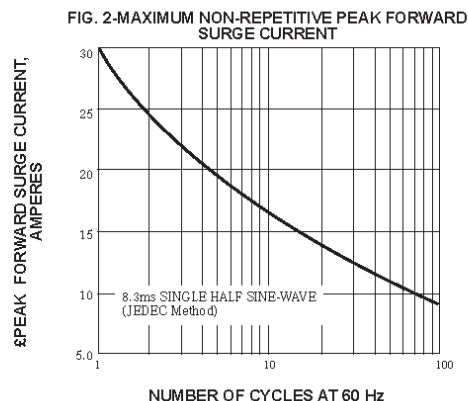
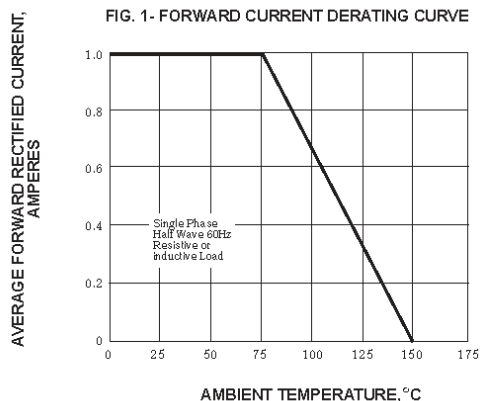
ISO 14001:2004
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ISO 9001:2000
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Dated : 20/02/2008 C

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