

1N4933 THRU 1N4937

FAST RECOVERY RECTIFIERS

Reverse Voltage - 50 to 600 V

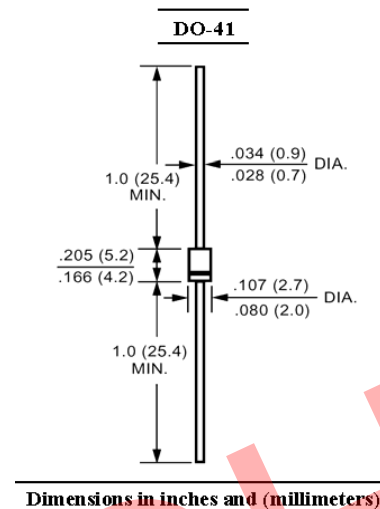
Forward Current - 1 A

Features

- Fast switching for high efficiency
- High surge current capability

Mechanical Data

- Case: Molded plastic, DO-41
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Mounting Position: Any



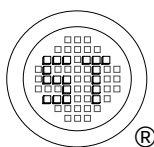
Maximum Ratings and Electrical Characteristics

Ratings 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	1N4933	1N4934	1N4935	1N4936	1N4937	Units
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 0.375" (9.5 mm) Lead Length at $T_A = 50^\circ\text{C}$	$I_{F(AV)}$	1					A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30					A
Maximum Forward Voltage at 1 A	V_F	1.2					V
Maximum Reverse Current $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A = 125^\circ\text{C}$	I_R	5 50					μA
Maximum Reverse Recovery Time ¹⁾	t_{rr}	150					ns
Typical Thermal Resistance, Junction to Ambient ²⁾	$R_{\theta JA}$	55					$^\circ\text{C/W}$
Typical Thermal Resistance, Junction to Lead ²⁾	$R_{\theta JL}$	25					$^\circ\text{C/W}$
Operating Junction temperature range	T_j	- 55 to + 125					$^\circ\text{C}$
Storage Temperature range	T_{stg}	- 55 to + 150					$^\circ\text{C}$

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

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

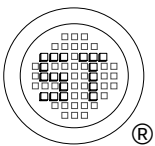
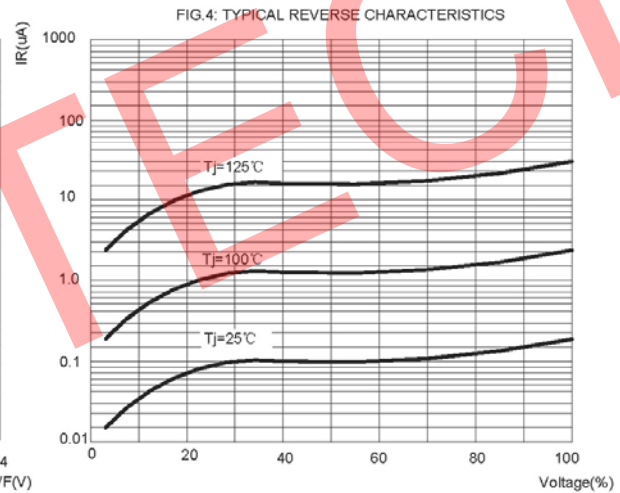
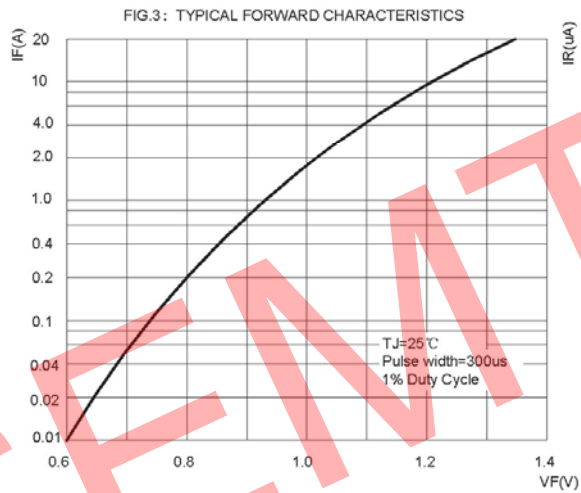
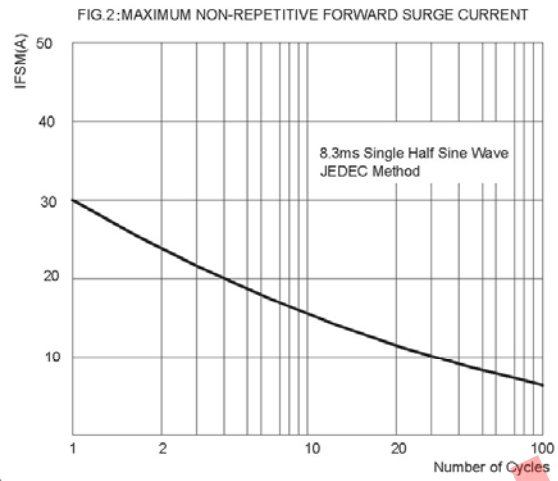
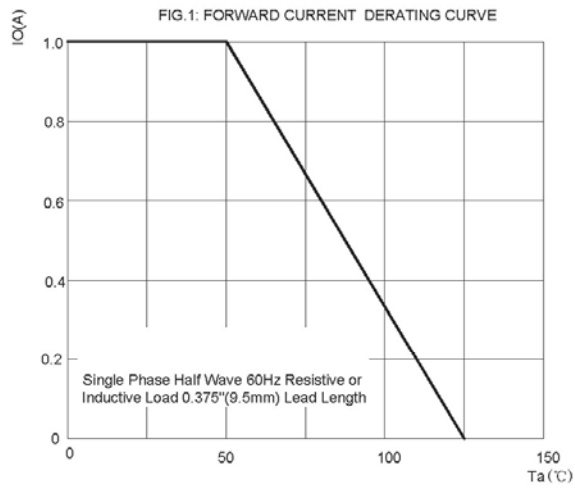


SEMTECH ELECTRONICS LTD.



Dated : 23/10/2014 YJ Rev: 01

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