

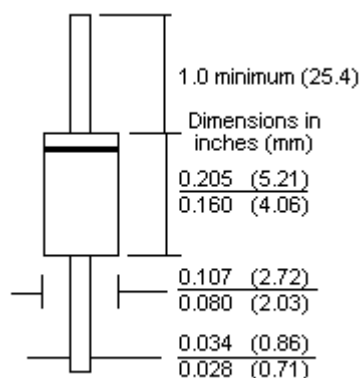
1N4933/4934/4935/4936/4937

0.5A to 6A Axial



Features:

- Low forward voltage drop.
- High surge current capability.
- High reliability.
- High current capability.
- DO-41 package.



Length = 0.20 (5.2), Diameter = 0.106 (2.7)

Dimensions : Inches (Millimetres)

1.0Ampere Fast Recovery Rectifiers

Absolute Maximum Ratings*

$T_A = 25^\circ\text{C}$ unless otherwise noted.

Symbol	Parameter	Value	Units
I_O	Average rectified current 0.375" lead length at $T_A = 50^\circ\text{C}$	1.0	A
$I_{f(\text{surge})}$	Peak forward surge current 8.3ms single half-sine-wave Superimposed on rated load (JEDEC method)	30	
P_D	Total device dissipation Derate above 25°C	2.5 20	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal resistance, Junction to ambient	50	$^\circ\text{C}/\text{W}$
T_{stg}	Storage temperature range	-50 to +150	$^\circ\text{C}$
T_J	Operating junction temperature		

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.



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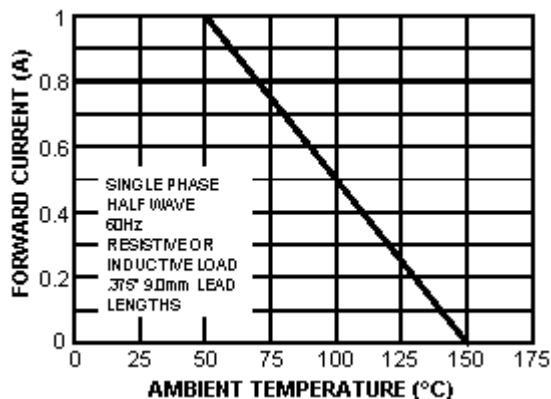


Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

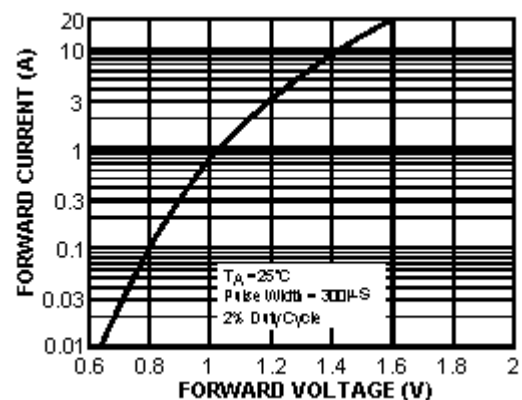
Parameter	Device					Units
	1N4933	1N4934	1N4935	1N4936	1N4937	
Peak repetitive reverse voltage	50	100	200	400	600	V
Maximum RMS voltage	35	70	140	280	420	
DC reverse voltage (Rated V_R)	50	100	200	400	600	
Maximum reverse current at rated V_R $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	5.0 100					μA
Maximum reverse recovery time $I_F = 1\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$	150					nS
Maximum forward voltage at 1.0A	1.2					V
Typical junction capacitance $V_R = 4.0\text{V}$, $f = 1.0\text{MHz}$	12					pF

Typical Characteristics

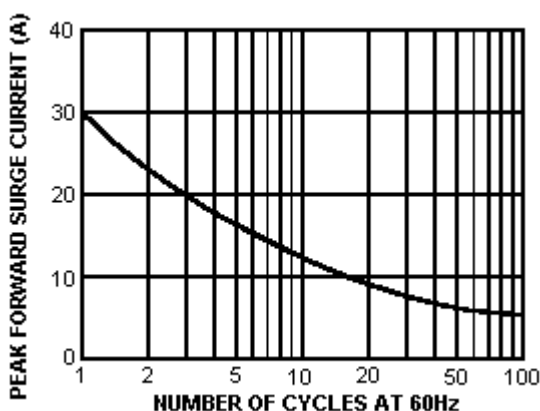
Forward Current Derating Curve



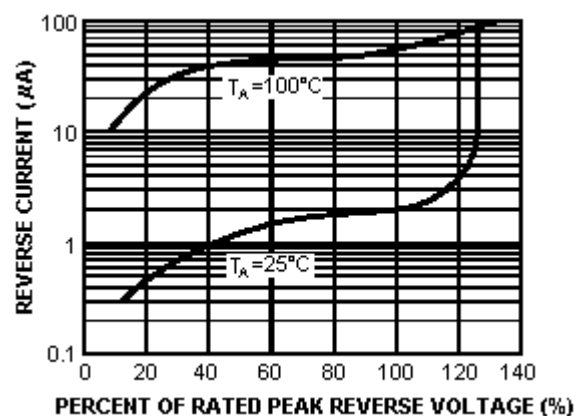
Forward Characteristics



Non-Repetitive Surge Current



Reverse Characteristics

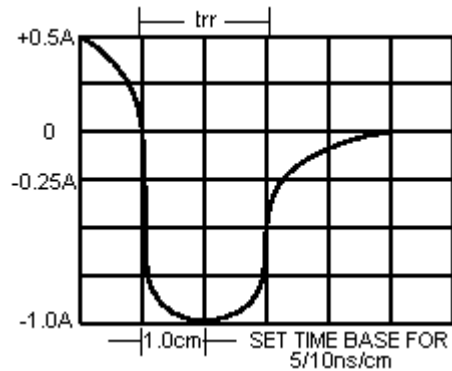
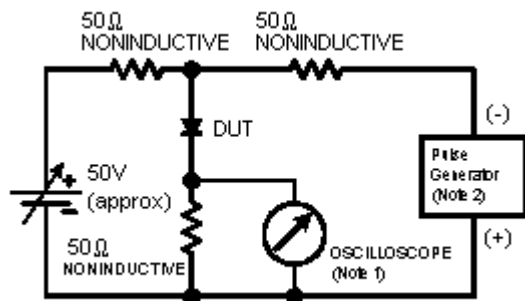
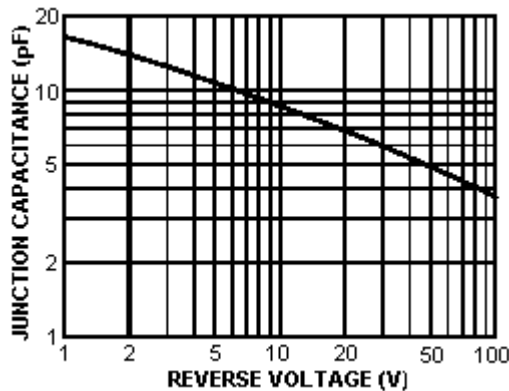


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Typical Junction Capacitance



Notes:

1. Rise time = 7.0ns maximum; Input impedance = 1.0 MegaΩ 22pF.
2. Rise time = 10ns maximum; Source impedance = 50Ω.

Reverse Recovery Time Characteristic and Test Circuit Diagram

Specifications

$I_{F(av)}$ (A)	I_{FSM} (A)	t_{rr} maximum (ns)	V_F (V)	I_F (A)	Package	Part Number
1	30	150	1.2	1	DO-41	1N4933
						1N4934
						1N4935
						1N4936
						1N4937

Order Multiple = 10



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Notes:

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