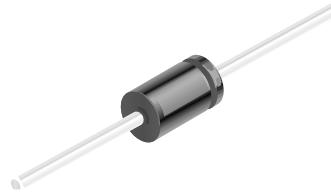




1N4933 - 1N4937

Features

- Low forward voltage drop.
- High surge current capability.
- High reliability.
- High current capability.



DO-41
COLOR BAND DENOTES CATHODE

Fast Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value					Units
		4933	4934	4935	4936	4937	
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	V
I _{F(AV)}	Average Rectified Forward Current, .375 " lead length @ T _A = 50°C	1.0					A
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	30					A
T _{stg}	Storage Temperature Range	-50 to +150					°C
T _J	Operating Junction Temperature	-50 to +150					°C

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

Thermal Characteristics

Symbol	Parameter	Value	Units
P _D	Power Dissipation	2.5	W
R _{θJA}	Thermal Resistance, Junction to Ambient	50	°C/W

Electrical Characteristics

T_A = 25°C unless otherwise noted

Symbol	Parameter	Device					Units
		4933	4934	4935	4936	4937	
V _F	Forward Voltage @ 1.0 A	1.2					V
t _{tr}	Reverse Recovery Time I _F = 0.5 A, I _R = 1.0 A, I _{tr} = 0.25 A	150					ns
I _R	Reverse Current @ rated V _R T _A = 25°C T _A = 125°C	5.0 100					μA μA
C _T	Total Capacitance V _R = 4.0 V, f = 1.0 MHz	12					pF

Typical Characteristics

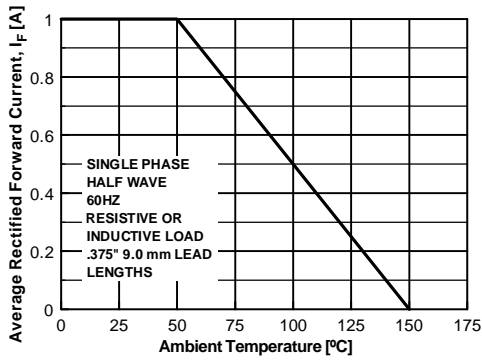


Figure 1. Forward Current Derating Curve

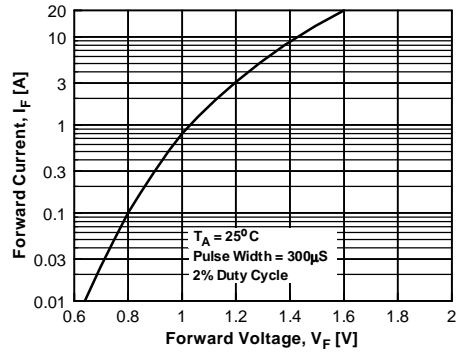


Figure 2. Forward Voltage Characteristics

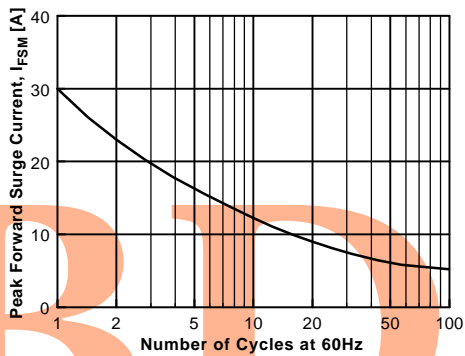


Figure 3. Non-Repetitive Surge Current

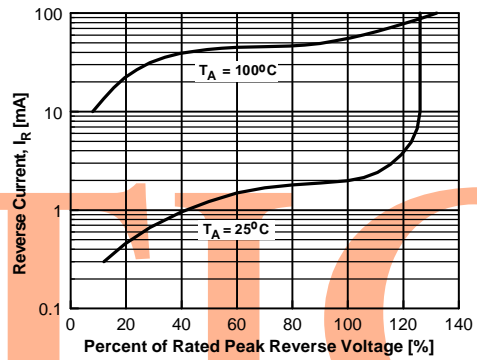


Figure 4. Reverse Current vs Reverse Voltage

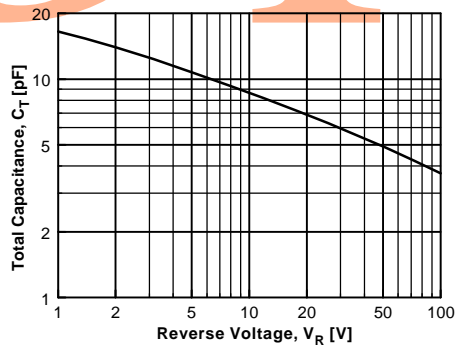
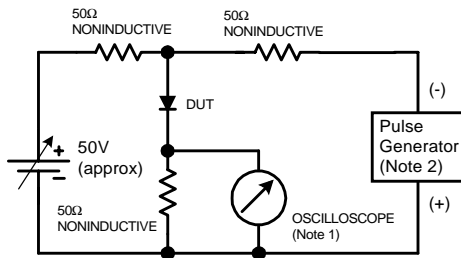
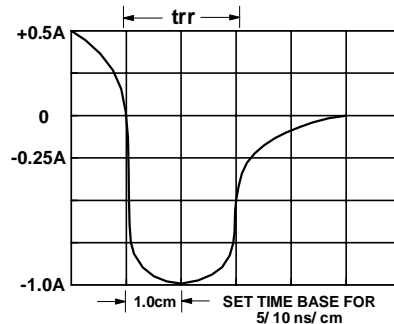


Figure 5. Total Capacitance



- NOTES:
 1. Rise time = 7.0 ns max; Input impedance = 1.0 megaohm 22 pf.
 2. Rise time = 10 ns max; Source impedance = 50 ohms.



Reverse Recovery Time Characteristic and Test Circuit Diagram

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