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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		\	'alue			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			Α

Thermal Characteristics

Symbol	Parameter	Value	Units
P _D	Power Dissipation	2.5	W
$R_{\theta JA}$	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 _{rr}	Reverse Recovery Time $I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}, I_{rr} = 0.25 \text{ A}$	150		ns			
I _R	Reverse Current @ rated V_R $T_A = 25^{\circ}C$ $T_A = 125^{\circ}C$	5.0 100				μA μA	
Ст	Total Capacitance V _R = 4.0 V, f = 1.0 MHz	12		pF			

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

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Typical Characteristics

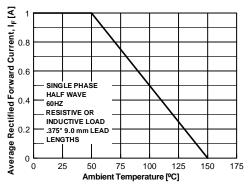


Figure 1. Forward Current Derating Curve

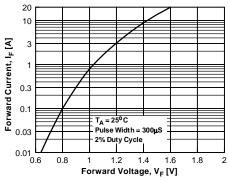


Figure 2. Forward Voltage Characteristics

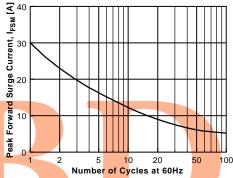


Figure 3. Non-Repetitive Surge Current

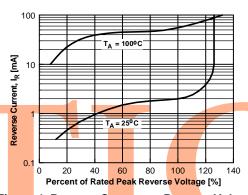


Figure 4. Reverse Current vs Reverse Voltage

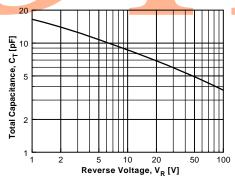
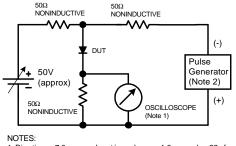
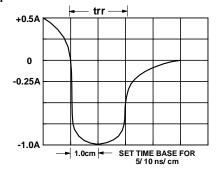


Figure 5. Total Capacitance



- 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 Characterstic and Test Circuit Diagram

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Rev. H4