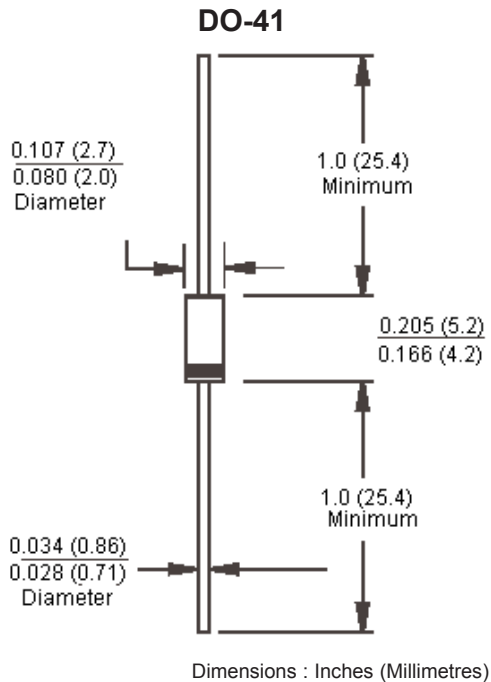




## Features:

- High efficiency, low  $V_F$ .
- High current capability.
- High reliability.
- High surge current capability.
- Low power loss.



## Mechanical Data:

Cases	: Moulded plastic.
Lead	: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed.
Polarity	: Colour band denotes cathode end.
High temperature soldering guaranteed	: 260°C/10 seconds/0.375 inch, (9.5mm) lead lengths at 5lbs., (2.3kg) tension.
Weight	: 0.34 grams.

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Type Number	Symbol	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	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	
Maximum Average Forward Rectified Current 0.375 inch (9.5mm) Lead Length at $T_A = 55^\circ\text{C}$	$I_{(AV)}$	1.0					A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	30					
Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	1.2					V
Maximum DC Reverse Current at $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_A = 125^\circ\text{C}$	$I_R$	5.0 150					$\mu\text{A}$ $\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	200					nS
Typical Junction Capacitance (Note 2)	$C_j$	10					pF
Typical Thermal Resistance	$R_{\theta JA}$	65					$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-65 to +150					$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$						

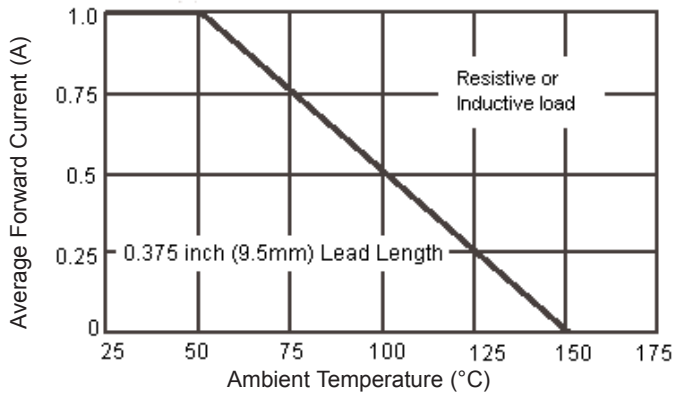
Note: 1. Reverse Recovery Test Conditions:  $I_F = 1.0\text{A}$ ,  $V_R = 30\text{V}$ ,  $di/dt = 50\text{A}/\mu\text{S}$ ,  $I_{rr} = 10\%$  IRM for Measurement of  $t_{rr}$ .

2. Measured at 1MHz and Applied Reverse Voltage of 4.0V dc.

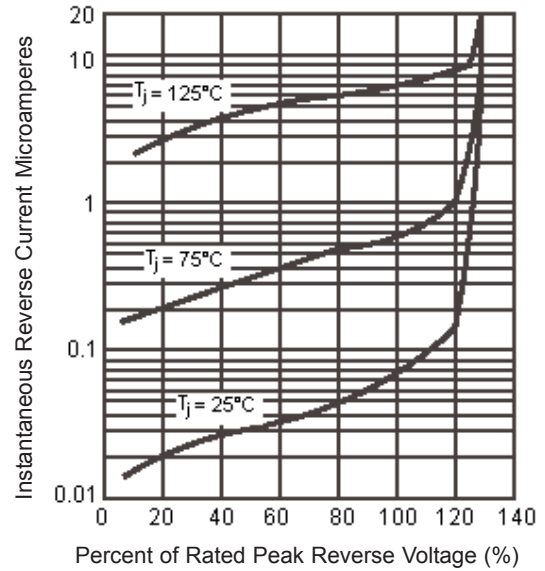
3. Mount on Cu-Pad Size 5mm x 5mm on PCB.

## Ratings and Characteristic Curves (1N4933 thru 1N4937)

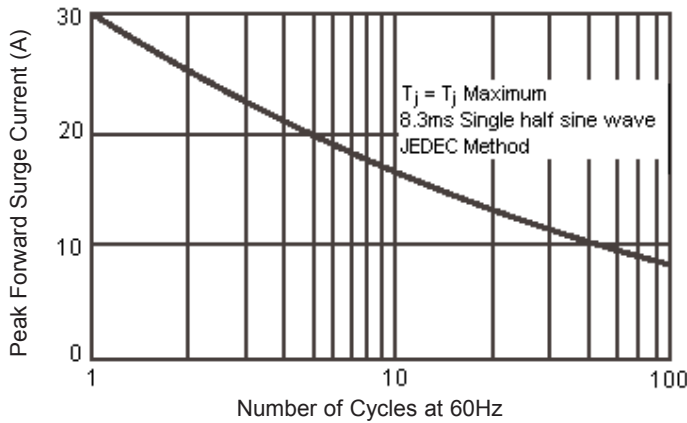
**Maximum Forward Current Derating Curve**



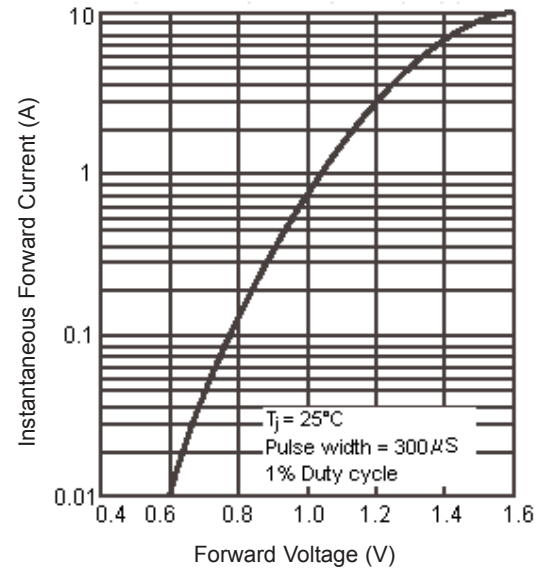
**Typical Reverse Characteristics**



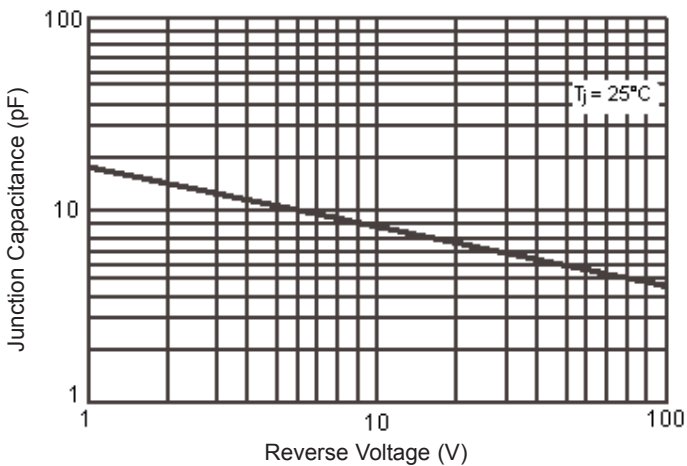
**Maximum Non-Repetitive Peak Forward Surge Current**



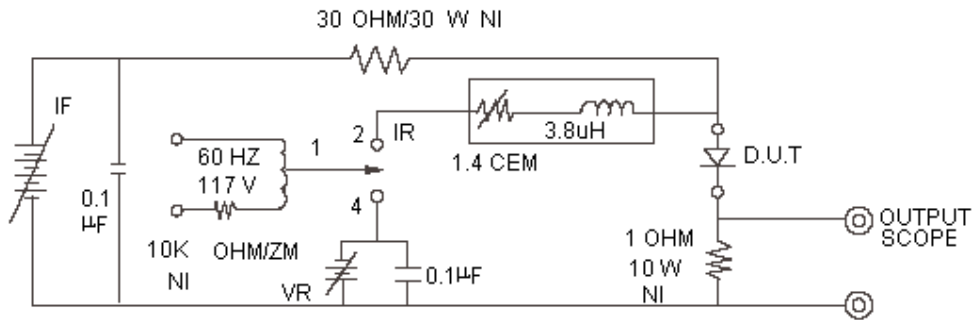
**Typical Instantaneous Forward Characteristics**



**Typical Junction Capacitance**



## Reverse Recovery Time Characteristic and Test Circuit Diagram



## Part Number Table

Description	Part Number
Diode, Fast, 1A, 50V	1N4933
Diode, Fast, 1A, 100V	1N4934
Diode, Fast, 1A, 200V	1N4935
Diode, Fast, 1A, 400V	1N4936
Diode, Fast, 1A, 600V	1N4937

## Notes:

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