



# 1N4154

## High Conductance Fast Diode

### Features

- 500 milliwatt Power Dissipation package.
- Fast Switching Speed.
- Typical capacitance less than 1.0 picofarad.

### General Description

The high breakdown voltage, fast switching speed and high forward conductance of this diode packaged in a DO-35 miniature Glass Axial leaded package makes it desirable also as a general purpose diode.



**DO-35**  
Color Band Denotes Cathode

### Absolute Maximum Ratings \* $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Unit
$W_{IV}$	Working Inverse Voltage	35	V
$I_O$	Average Rectified Current	100	mA
$I_F$	DC Forward Current ( $I_F$ )	300	mA
$i_f$	Recurrent Peak Forward Current ( $I_F$ )	400	mA
$i_{F(\text{surge})}$	Peak Forward Surge Current ( $I_{FSM}$ ) Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0	A
		4.0	A
$T_{STG}$	Storage Temperature Range	-65 to +200	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	175	$^\circ\text{C}$

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

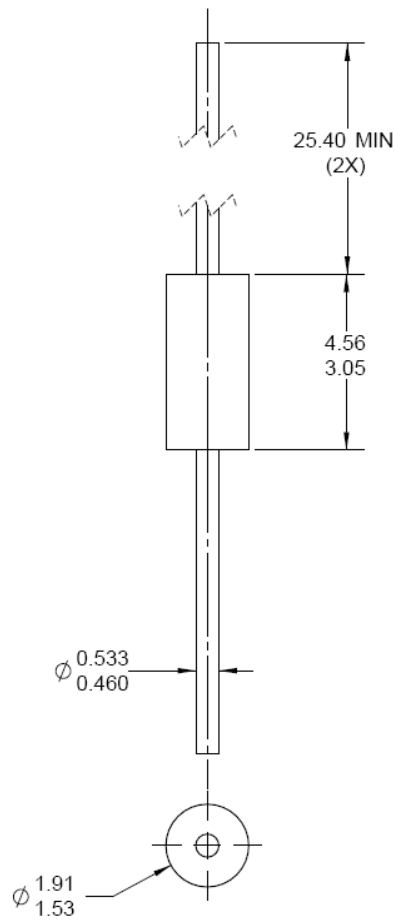
### Thermal Characteristics

Symbol	Parameter	Value	Unit
$P_D$	Total Power Dissipation at $T_A = 25^\circ\text{C}$	500	mW
	Linear Derating Factor from $T_A = 25^\circ\text{C}$	3.33	mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	$^\circ\text{C}/\text{W}$

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

Symbol	Parameter	Conditions	Min.	Max	Units
$B_V$	Breakdown Voltage	$I_R = 5.0\mu\text{A}$	35		V
$I_R$	Reverse Leakage	$V_R = 25\text{V}$ $V_R = 25\text{V}, T_A = 150^\circ\text{C}$		100 100	nA $\mu\text{A}$
$V_F$	Forward Voltage	$I_F = 30\text{mA}$		1.0	V
$C_T$	Capacitance	$V_R = 0, f = 1.0\text{MHz}$		4.0	pF
$T_{RR}$	Reverse Recovery Time	$I_F = 10\text{mA}, V_R = 6.0\text{V}$ $I_{RR} = 1.0\text{mA}, R_L = 100\Omega$		4.0	ns

**Physical Dimensions ( DO-35 )**









NOTES: UNLESS OTHERWISE SPECIFIED

- A) PACKAGE STANDARD REFERENCE: JEDEC DO-204, VARIATION AH.
- B) HERMETICALLY SEALED GLASS PACKAGE.
- C) PACKAGE WEIGHT IS 0.137 GRAM.
- D) ALL DIMENSIONS ARE IN MILLIMETERS.
- E) DRAWING FILE NAME: DO35AREV02



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	Power-SPM™		

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#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.