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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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July 2009

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 ℃ 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	
İf	Recurrent Peak Forward Current (I _F)	400	mA	
i _{F(surge)}	Peak Forward Surge Current (I _{FSM}) Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 4.0	A A	
T _{STG}	Storage Temperature Range	-65 to +200	°C	
T _J	Operating Junction Temperature	175	°C	

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

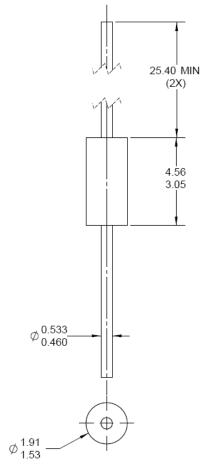
Thermal Characteristics

Symbol	Parameter	Value	Unit	
P _D	Total Power Dissipation at T _A = 25 °C Linear Derating Factor from T _A = 25 °C	500 3.33	mW mW/°C	
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	°C/W	

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

Symbol	Parameter	Conditions	Min.	Max	Units
B _V	Breakdown Voltage	$I_R = 5.0 \mu A$	35		V
I _R	Reverse Leakage	V _R = 25V V _R = 25V, T _A = 150°C		100 100	nA μA
V _F	Forward Voltage	I _F = 30mA		1.0	V
C _T	Capacitance	V _R = 0, f = 1.0MHz		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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Definition of Terms

Definition of Terms				
Datasheet Identification	Product Status	Definition		
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Preliminary	First Production	Datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.		
No Identification Needed	Full Production	Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.		
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