

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

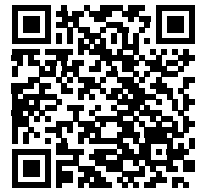
Part Number: 1N4153_T50R
Manufacturer: onsemi
Package: DO-204AH, DO-35, Axial
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/onsemi/1n4153-t50r.html>

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New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

1N4153

Small Signal Diode



DO-35
Color Band Denotes Cathode

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

Symbol	Parameter	Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	75	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 4.0	A 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 the diode may be impaired.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 200 degrees C.
- 2) These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

Symbol	Parameter	Value	Unit
P_D	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	$^\circ\text{C/W}$

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

Symbol	Parameter	Conditions	Min.	Max	Units
V_R	Breakdown Voltage	$I_R = 5\mu\text{A}$	75		V
V_F	Forward Voltage	$I_F = 0.1\text{mA}$	0.49	0.55	V
		$I_F = 0.25\text{mA}$	0.53	0.59	V
		$I_F = 1.0\text{mA}$	0.59	0.67	V
		$I_F = 2.0\text{mA}$	0.62	0.70	V
		$I_F = 10\text{mA}$	0.70	0.81	V
		$I_F = 20\text{mA}$	0.74	0.88	V
I_R	Reverse Leakage	$V_R = 50\text{V}$ $V_R = 50\text{V}, T_A = 150^\circ\text{C}$		50 50	nA μA
C_T	Total Capacitance	$V_R = 0, f = 1.0\text{MHz}$		2	pF
t_{rr1}	Reverse Recovery Time	$I_F = I_R = 10\text{mA}, R_L = 100\Omega, I_{rr} = 1.0\text{mA}$		4	ns
t_{rr2}		$I_F = 10\text{mA}, V_R = 6.0\text{V}$ $R_L = 100\Omega, I_{rr} = 1.0\text{mA}$		2	ns

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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