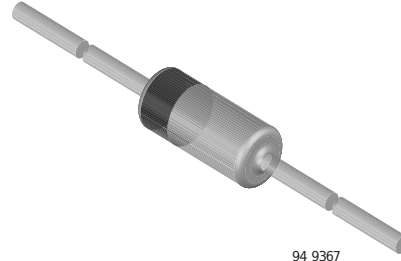


# 1N914 Datasheet

## Features

- Fast switching speed
- High reliability
- High conductance
- For general purpose switching applications



94 9367

## Mechanical Data

**Case:** DO-35 Glass Case

**Weight:** approx. 130 mg

### Packaging Codes/Options:

TR / 10 k per 13 " reel (52 mm tape), 50 k/box

TAP / 10 k per Ammopack (52 mm tape), 50 k/box

## Parts Table

Part	Type differentiation	Ordering code	Remarks
1N914	$V_{RRM} = 75 \text{ V}$	1N914-TAP / 1N914-TR	Ammopack / Tape and Reel

## Absolute Maximum Ratings

$T_{amb} = 25 \text{ }^\circ\text{C}$ , unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Non repetitive peak reverse voltage		$V_{RM}$	100	V
Repetitive peak reverse voltage		$V_{RRM}$	75	V
Working peak reverse voltage		$V_{RWM}$	75	V
DC blocking voltage		$V_R$	75	V
RMS Reverse voltage		$V_{R(RMS)}$	53	V
Forward current		$I_F$	300	mA
Average rectified current	half wave rectification with resistive load and $f > 50 \text{ MHz}$	$I_{FAV}$	200	mA
Non repetitive peak forward surge current	$t = 1 \text{ s}$	$I_{FSM}$	1	A
	$t = 1 \text{ } \mu\text{s}$	$I_{FSM}$	4	A
Power dissipation	$l = 4 \text{ mm}$ , $T_L 25 \text{ }^\circ\text{C}$	$P_d$	500	mW

## Thermal Characteristics

$T_{amb} = 25 \text{ }^\circ\text{C}$ , unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Junction ambient	$l = 4 \text{ mm}$ , $T_L = \text{constant}$	$R_{thJA}$	300	K/W
Operating and storage temperature range		$T_j, T_{stg}$	-65 to +175	$^\circ\text{C}$

# Electrical Characteristics

$T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Forward voltage	$I_F = 10\text{ mA}$	$V_F$			1	V
Breakdown Voltage	$I_R = 100\text{ }\mu\text{A}$	$V_R$	100			V
Peak reverse current	$V_R = 75\text{ V}$	$I_R$			5.0	$\mu\text{A}$
	$V_R = 20\text{ V}, T_j = 150\text{ }^{\circ}\text{C}$	$I_R$			50	$\mu\text{A}$
	$V_R = 20\text{ V}$	$I_R$			25	nA
Diode capacitance	$V_R = 0, f = 1\text{ MHz}$	$C_D$			4	pF
Reverse recovery time	$I_F = 10\text{ mA}$ to $I_R = 1\text{ mA}$ , $V_R = 6\text{ V}, R_L = 100\text{ }\Omega$	$t_{rr}$			4	ns

## Typical Characteristics ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

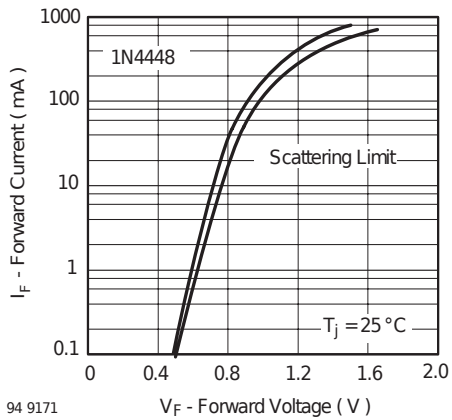


Figure 1. Forward Current vs. Forward Voltage

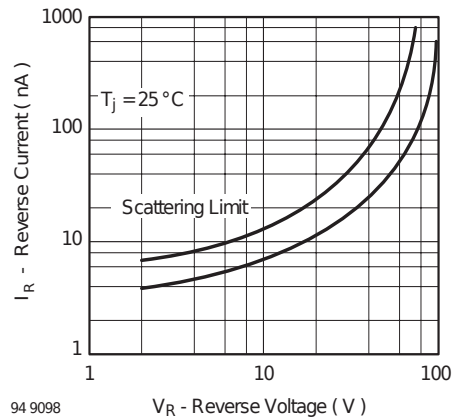


Figure 2. Reverse Current vs. Reverse Voltage

## Package Dimensions in mm (Inches)

