

# 1N914/A/B

## HIGH SPEED SWITCHING DIODES

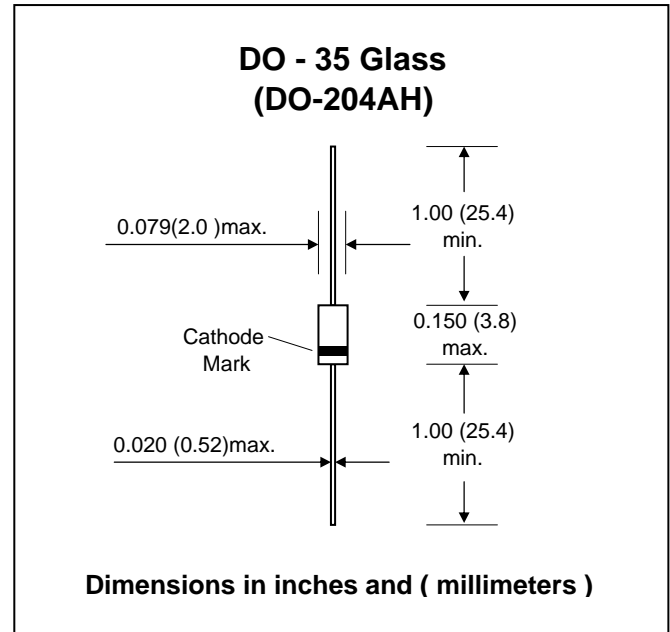
### FEATURES :

- High switching speed: max. 4 ns
- Continuous reverse voltage: max. 75 V
- Repetitive peak reverse voltage: max. 100 V
- Repetitive peak forward current: max. 225 mA
- Pb / RoHS Free

### MECHANICAL DATA :

**Case:** DO-35 Glass Case

**Weight:** approx. 0.13g



### Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

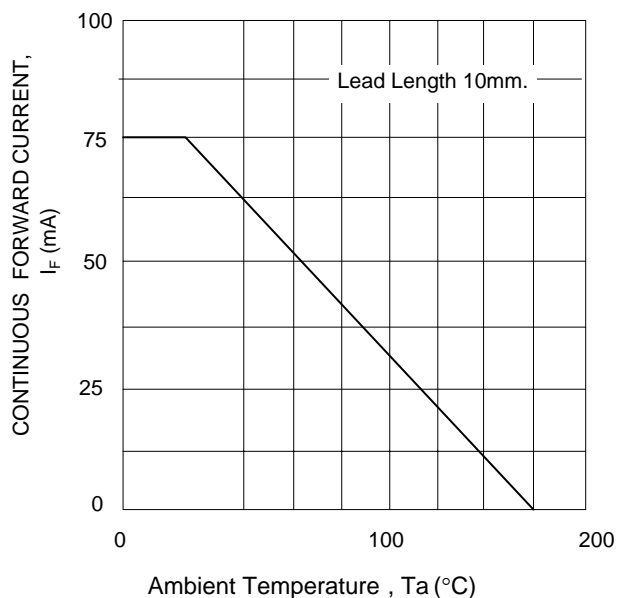
Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum Continuous Reverse Voltage	$V_{RM}$	75	V
Maximum Continuous Forward Current	$I_F$	75	mA
Maximum Power Dissipation	$P_D$	250	mW
Maximum Repetitive Peak Forward Current	$I_{FRM}$	225	mA
Maximum Non-repetitive Peak Forward Current at $t = 1s$	$I_{FSM}$	0.5	A
Maximum Junction Temperature	$T_J$	175	°C
Storage Temperature Range	$T_S$	-65 to + 200	°C

### Electrical Characteristics ( $T_J = 25^\circ\text{C}$ unless otherwise noted)

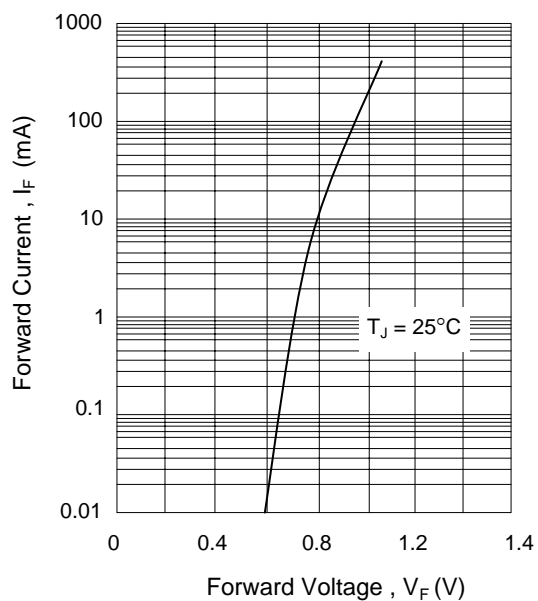
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Current	$I_R$	$V_R = 20\text{ V}$	-	-	25	nA
		$V_R = 20\text{ V}, T_J = 150^\circ\text{C}$	-	-	50	$\mu\text{A}$
Forward Voltage	$V_F$	<b>1N914</b> $I_F = 10\text{ mA}$	-	-	1.0	V
		<b>1N914A</b> $I_F = 20\text{ mA}$	-	-	1.0	V
		<b>1N914B</b> $I_F = 5\text{ mA}$	0.62	-	0.72	V
		<b>1N914B</b> $I_F = 100\text{ mA}$	-	-	1.0	V
Diode Capacitance	$C_d$	$f = 1\text{ MHz}; V_R = 0$	-	-	4.0	pF
Reverse Recovery Time	$T_{rr}$	$I_F = 10\text{ mA to } I_R = 60\text{ mA}$ $R_L = 100\ \Omega$ ; measured at $I_R = 1\text{ mA}$	-	-	4	ns

## RATING AND CHARACTERISTIC CURVES ( 1N914/A/B )

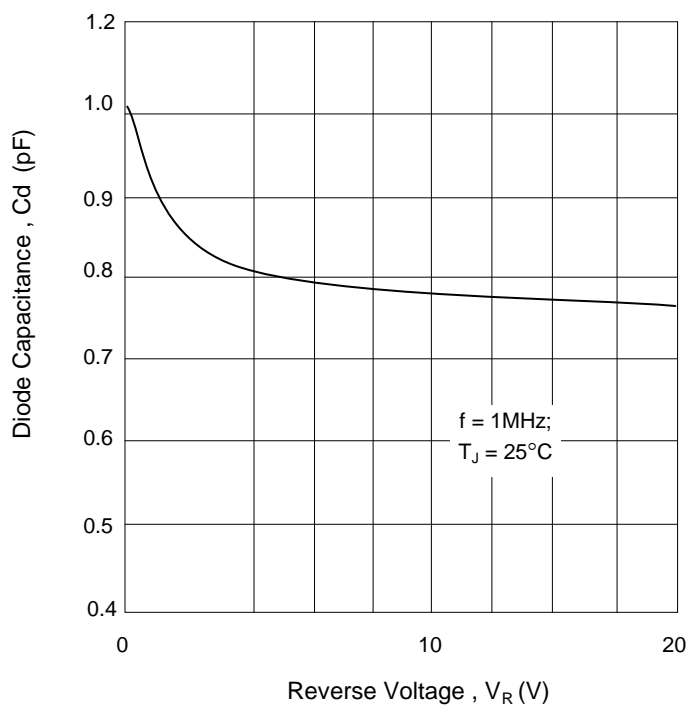
**FIG. 1 MAXIMUM PERMISSIBLE CONTINUOUS FORWARD CURRENT AS A FUNCTION OF AMBIENT TEMPERATURE.**



**FIG. 2 TYPICAL FORWARD VOLTAGE**



**FIG. 3 TYPICAL DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE**



**FIG. 4 TYPICAL REVERSE CURRENT VERSUS JUNCTION TEMPERATURE**

