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## 1N916 Small Signal Diode

**Features:**

- DO-35 Package

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$ , Note 1 unless otherwise specified)

Max. Repetitive Reverse Voltage, $V_{RRM}$	100V
Power Dissipation, $P_D$	500mW
Average Rectified Forward Current, $I_{F(AV)}$	200mA
None-Repetitive Forward Surge Current, $I_{FSM}$	
Pulse Width = 1.0 seconds	1.0A
Pulse Width = 1.0 microsecond	4.0A
Operating Junction Temperature, $T_J$	175°C
Storage Temperature Range, $T_{stg}$	-65° to +200°C
Thermal Resistance, Junction-to-Ambient, $R_{thJA}$	+300°C/W

Note 1. These ratings are limiting values above which the serviceability of the device may be impaired.

Note 2. These ratings are based on a maximum junction temperature of +200°C.

Note 3. These are steady state limits.

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	$V_R$	$I_R = 100\mu\text{A}$	100	-	-	V
		$I_R = 5\mu\text{A}$	75	-	-	V
Forward Voltage	$V_F$	$I_F = 10\text{mA}$	-	-	1.0	V
Reverse Current	$I_R$	$V_R = 20\text{V}$	-	-	25	nA
		$V_R = 20\text{V}, T_A = +150^\circ\text{C}$	-	-	50	$\mu\text{A}$
		$V_R = 75\text{V}$	-	-	5	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$	$I_F = 10\text{mA}, V_R = 6\text{V} (60\text{mA})$ $I_{rr} = 1\text{mA}, R_L = 100\Omega$	-	-	4	nS

