



ELECTRONICS, INC.

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1N4531 Small Signal Diode

Features:

- DO-34 Package

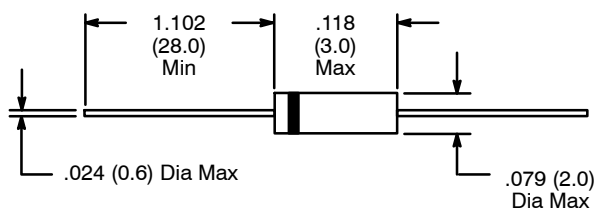
Absolute Maximum Ratings:

Repetitive Peak Reverse Voltage, V_{RRM}	75V
Continuous Reverse Voltage, V_R	75V
Continuous Forward Current, I_F	200mA
Repetitive Peak Forward Current, I_{FRM}	450mA
None-Repetitive Forward Surge Current (Square Wave, $T_J = +25^\circ\text{C}$ prior to surge), I_{FSM}	
Pulse Width = 1.0 microsecond	4.0A
Pulse Width = 1.0 millisecond	1.0A
Pulse Width = 1.0 second	0.5A
Power Dissipation ($T_A = +25^\circ\text{C}$), P_D	500mW
Operating Junction Temperature, T_J	+200°C
Storage Temperature Range, T_{stg}	-65° to +200°C
Thermal Resistance, Junction-to-Ambient (5mm Lead Length, Note 1), R_{thJA}	+350°C/W
Thermal Resistance, Junction-to-Tie-Point (5mm Lead Length), R_{thJTP}	+120°C/W

Note 1. Device mounted on a printed circuit board without metallization pad.

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F = 10\text{mA}$	-	-	1000	mV
Reverse Current	I_R	$V_R = 20\text{V}$	-	-	25	nA
		$V_R = 20\text{V}$, $T_A = +150^\circ\text{C}$	-	-	50	μA
Diode Capacitance	C_d	$V_R = 0$, $f = 1\text{MHz}$	-	-	4	pF
Reverse Recovery Time	t_{rr}	Switched from $I_F = 10\text{mA}$ to $I_R = 60\text{mA}$, $R_L = 100\Omega$, measured at $I_R = 1\text{mA}$	-	-	4	ns
Forward Recovery Voltage	t_{fr}	Switched from $I_F = 100\text{mA}$, $t_r \leq 30\text{ns}$	-	-	4	ns



Color Band Denotes Cathode