

1N4152

FEATURES :

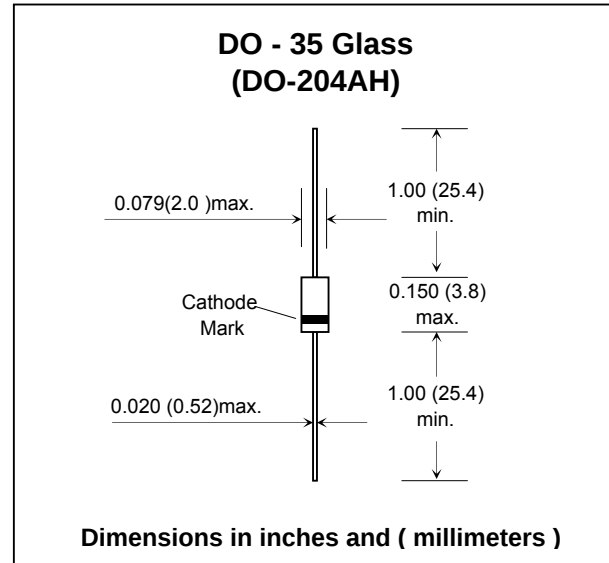
- High switching speed: max. 4 ns
- Peak reverse voltage: max. 40 V
- Pb / RoHS Free

MECHANICAL DATA :

Case: DO-35 Glass Case

Weight: approx. 0.13g

HIGH SPEED SWITCHING DIODE



Maximum Ratings and Thermal Characteristics (Ta = 25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RM}	75	V
Maximum Average Forward Current	$I_{F(AV)}$	150	mA
Maximum Non-repetitive Peak Forward Surge Current at $t_p = 1$ s at $t_p = 1 \mu s$	I_{FSM}	1.0	A
		4.0	
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	300	°C/W
Maximum Power Dissipation	P_D	500	mW
Operating Junction Temperature	T_J	175	°C
Storage Temperature Range	T_{STG}	-65 to + 200	°C

Electrical Characteristics (Ta = 25 °C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Current	I_R	$V_R = 30$ V	-	-	50	nA
		$V_R = 30$ V , $T_a = 150$ °C	-	-	50	μA
Forward Voltage	V_F	$I_F = 0.1$ mA	0.49	-	0.55	V
		$I_F = 0.25$ mA	0.53	-	0.59	
		$I_F = 1.0$ mA	0.59	-	0.67	
		$I_F = 2.0$ mA	0.62	-	0.70	
		$I_F = 10$ mA	0.70	-	0.81	
		$I_F = 20$ mA	0.74	-	0.88	
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 5 \mu A$	40	-	-	V
Diode Capacitance	C_d	$f = 1$ MHz ; $V_R = 0$	-	-	2.0	pF
Reverse Recovery Time	T_{rr1}	$I_F = I_R = 10$ mA, $R_L = 100 \Omega$, $I_{rr} = 1$ mA	-	-	4	ns
	T_{rr2}	$I_F = 10$ mA , $V_R = 6$ V, $R_L = 100 \Omega$, $I_{rr} = 1$ mA	-	-	2	ns