

HIGH SPEED SWITCHING DIODE

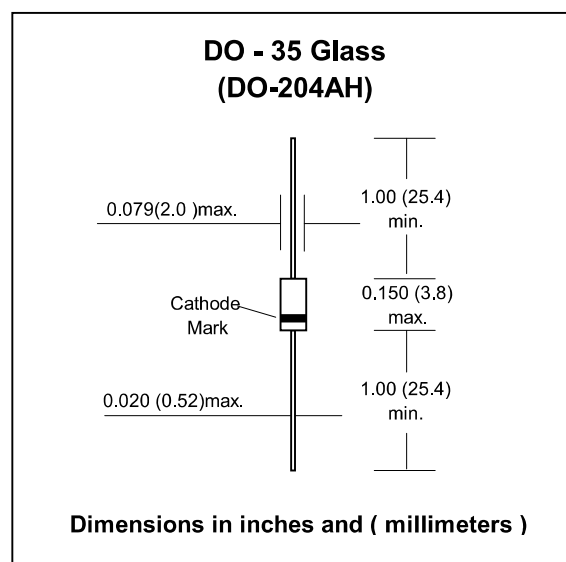
Features:

- High switching speed: max. 4 ns
- Reverse voltage: max. 75V
- Peak reverse voltage: max. 100 V
- 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 Peak Reverse Voltage	V_{RM}	100	V
Maximum Reverse Voltage	V_R	75	V
Maximum Continuous Forward Current	I_F	200	mA
Maximum Average Forward Current ⁽¹⁾ Half Wave Rectification with Resistive Load , $f \geq 50$ Hz	$I_{F(AV)}$	150	mA
Maximum Surge Forward Current at $t < 1s$, $T_J = 25^\circ C$	I_{FSM}	0.5	A
Maximum Power Dissipation	P_D	500	mW
Maximum Junction Temperature	T_J	175	°C
Storage Temperature Range	T_S	-65 to + 175	°C

Note : (1) Valid provided that leads at a distance of 8mm from case are kept at ambient temperature

Electrical Characteristics ($T_J = 25^\circ C$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Current	I_R	$V_R = 20$ V	-	-	25	nA
		$V_R = 20$ V , $T_J = 150$ °C	-	-	50	μA
Forward Voltage	V_F	$I_F = 10$ mA	-	-	1.0	V
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100$ μA (pulsed)	100	-	-	V
Diode Capacitance	C_d	$f = 1$ MHz ; $V_R = 0$	-	-	4.0	pF
Reverse Recovery Time	T_{rr}	$I_F = 10$ mA to $I_R = 1$ mA $V_R = 6$ V , $R_L = 100$ Ω	-	-	4.0	ns

RATING AND CHARACTERISTIC CURVES (1N4448)

FIG. 1 MAXIMUM FORWARD CURRENT VERSUS AMBIENT TEMPERATURE

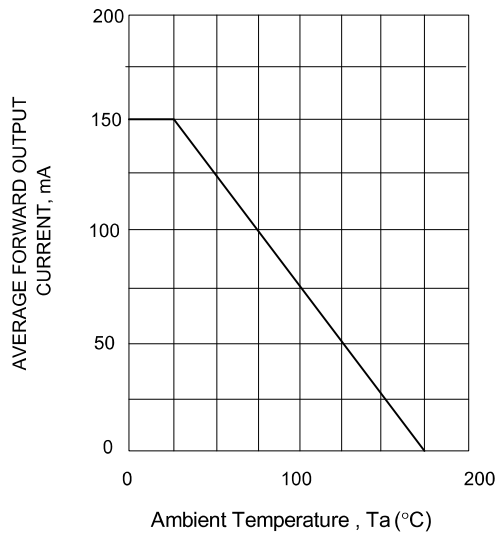


FIG. 2 TYPICAL FORWARD VOLTAGE

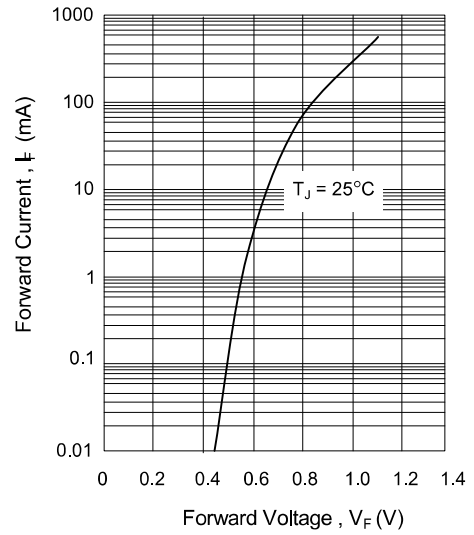


FIG. 3 TYPICAL DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE

