

BAV10

HIGH SPEED SWITCHING DIODE

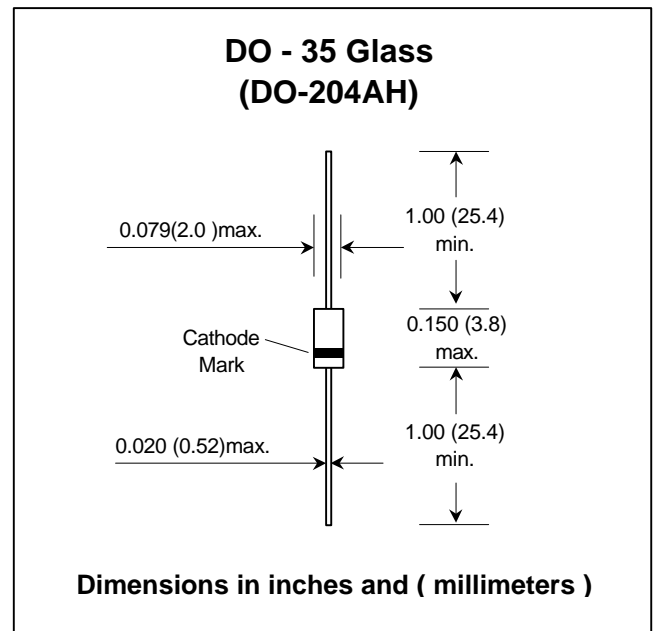
FEATURES :

- High switching speed: max. 6 ns
- General application
- Continuous reverse voltage: max. 60 V
- Repetitive peak reverse voltage: max. 60 V
- Repetitive peak forward current: max. 600 mA

MECHANICAL DATA :

Case: DO-35 Glass Case

Weight: approx. 0.11g



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}	60	V
Maximum Continuous Reverse Voltage	V_{RM}	60	V
Maximum Continuous Forward Current	I_F	300	mA
Maximum Power Dissipation	P_D	350	mW
Maximum Repetitive Peak Forward Current	I_{FRM}	600	mA
Maximum Non-repetitive Peak Forward Current at t = 1s	I_{FSM}	1.0	A
Maximum Junction Temperature	T_J	200	°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	$V_R = 60\text{ V}$	-	-	100	nA
		$V_R = 60\text{ V}, T_J = 150^\circ\text{C}$	-	-	100	μA
Forward Voltage	V_F	$I_F = 200\text{ mA}$	-	-	1.0	V
Diode Capacitance	Cd	f = 1MHz ; $V_R = 0$	-	-	2.5	pF
Reverse Recovery Time	Trr	$I_F = 400\text{mA}$ to $I_R = 400\text{mA}$ $R_L = 100\ \Omega$; measured at $I_R = 40\text{mA}$	-	-	6	ns

RATING AND CHARACTERISTIC CURVES (BAV10)

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

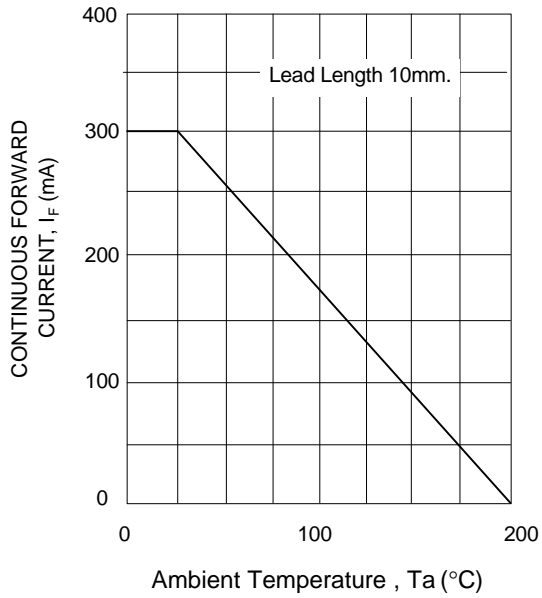


FIG. 2 TYPICAL FORWARD VOLTAGE

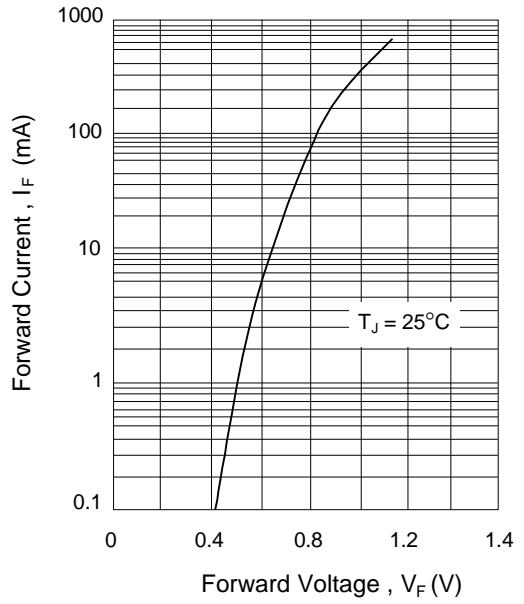


FIG. 3 TYPICAL DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE

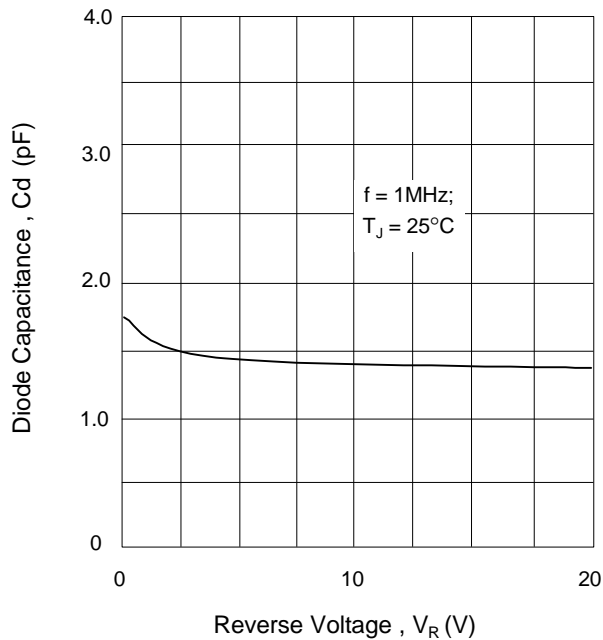


FIG. 4 TYPICAL REVERSE CURRENT VS JUNCTION TEMPERATURE

