

BAX14

FEATURES :

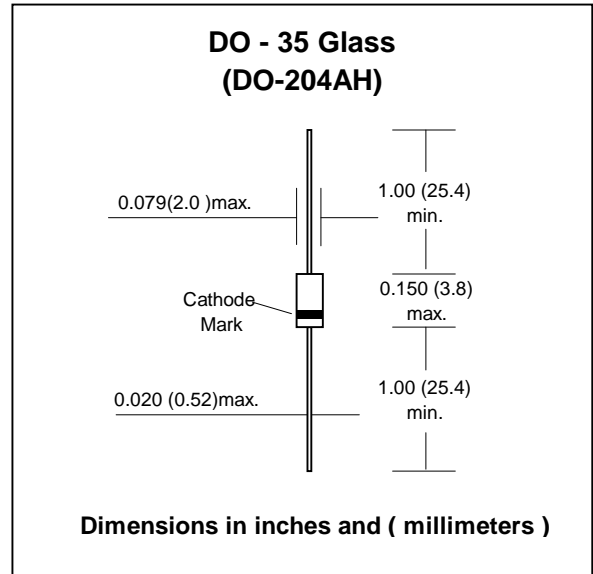
- Switching speed: max. 50 ns
- General application
- Continuous reverse voltage: max. 20 V
- Repetitive peak reverse voltage: max. 40 V
- Repetitive peak forward current: max. 2 A.
- Pb / RoHS Free

MECHANICAL DATA :

Case: DO-35 Glass Case

Weight: approx. 0.13g

SWITCHING DIODE



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}	40	V
Maximum Continuous Reverse Voltage	V_{RM}	20	V
Maximum Continuous Forward Current	I_F	500	mA
Maximum Average Forward Current	$I_{F(AV)}$	400	mA
Maximum Repetitive Peak Forward Current	I_{FRM}	2	A
Maximum Non-repetitive Peak Forward Current at $t = 10ms$, $T_j = 25\text{ }^\circ\text{C}$	I_{FSM}	9	A
Maximum Power Dissipation	P_D	450	mW
Maximum Junction Temperature	T_J	200	$^\circ\text{C}$
Storage Temperature Range	T_S	-65 to + 200	$^\circ\text{C}$

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Current	I_R	$V_R = 20\text{ V}$	-	-	100	nA
		$V_R = 20\text{ V}$, $T_j = 150^\circ\text{C}$	-	-	100	μA
Forward Voltage	V_F	$I_F = 300\text{ mA}$	0.75	-	1.0	V
Diode Capacitance	C_d	$f = 1\text{ MHz}$; $V_R = 0$	-	-	35	pF
Reverse Recovery Time	T_{rr}	$I_F = 30\text{ mA}$, $I_R = 30\text{ mA}$ $I_{RR} = 3\text{ mA}$, $R_L = 100\ \Omega$ measured at $I_R = 3\text{ mA}$	-	-	50	ns

RATING AND CHARACTERISTIC CURVES (BAX14)

FIG. 1 MAXIMUM FORWARD CURRENT VERSUS AMBIENT TEMPERATURE.

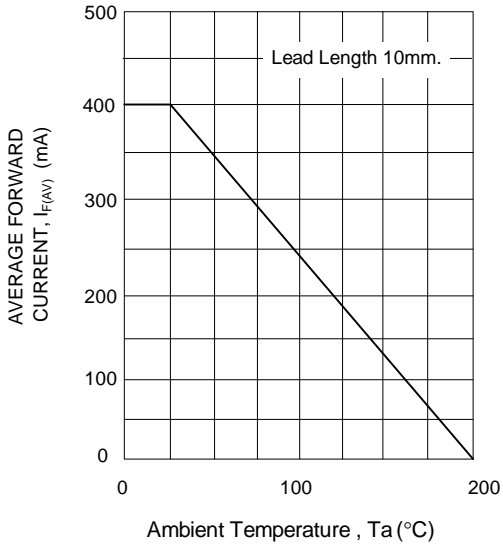


FIG. 2 TYPICAL FORWARD VOLTAGE

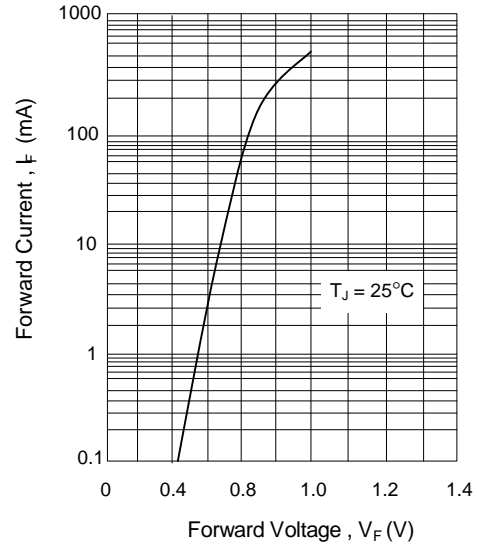


FIG. 3 TYPICAL DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE

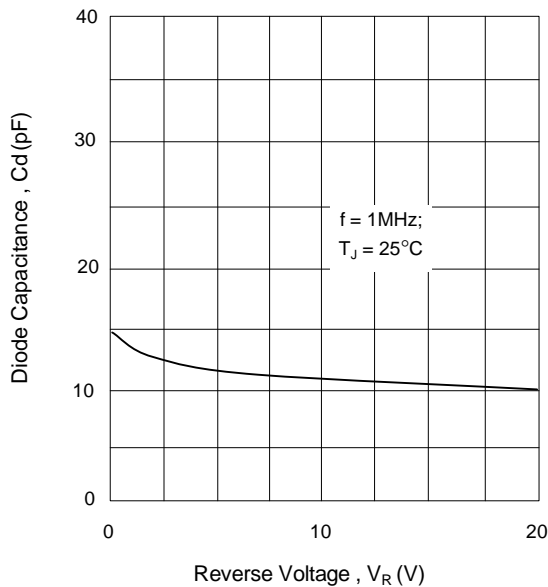


FIG. 4 TYPICAL REVERSE CURRENT VERSUS JUNCTION TEMPERATURE

