

# BAV10

## HIGH SPEED SWITCHING DIODE

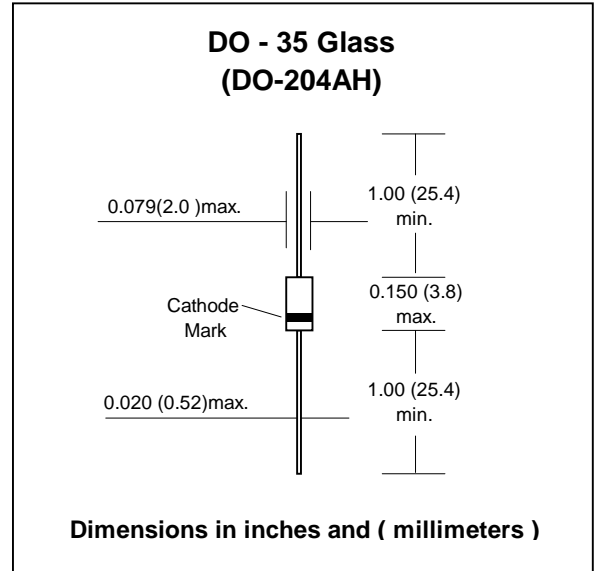
### FEATURES :

- 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
- \* Pb / RoHS Free

### 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.)

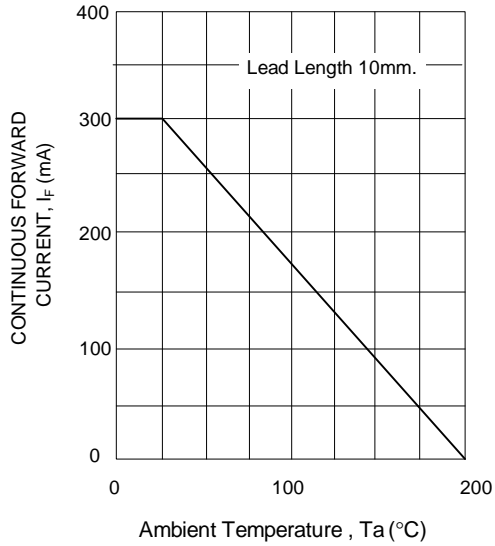
Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum Continuous Reverse Voltage	$V_{RM}$	60	V
Maximum Continuous Forward Current	$I_F$	300	mA
Maximum Power Dissipation	$P_D$	350	mW
Maximum Repetitive Peak Forward Current	$I_{FRM}$	600	mA
Maximum Surge Forward Current at $t < 1s$ , $T_J = 25^\circ C$	$I_{FSM}$	1.0	A
Maximum Junction Temperature	$T_J$	200	$^\circ C$
Storage Temperature Range	$T_S$	-65 to + 200	$^\circ C$

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

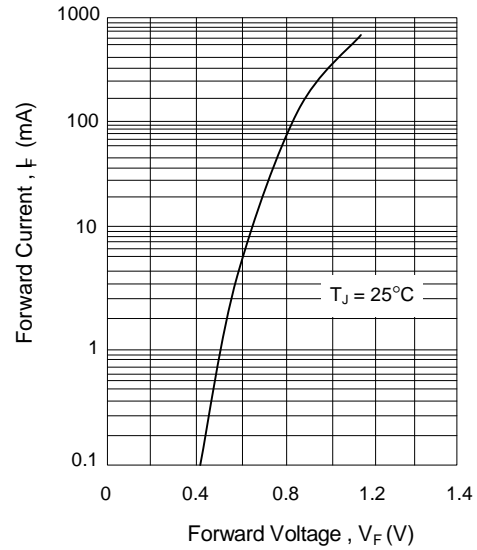
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Current	$I_R$	$V_R = 60 V$	-	-	100	nA
		$V_R = 60 V$ , $T_J = 150^\circ C$	-	-	100	$\mu A$
Forward Voltage	$V_F$	$I_F = 200 mA$	-	-	1.0	V
Diode Capacitance	$C_d$	$f = 1MHz$ ; $V_R = 0$	-	-	2.5	pF
Reverse Recovery Time	$T_{rr}$	$I_F = 400mA$ to $I_R = 400mA$ $R_L = 100 \Omega$ ; measured at $I_R = 40mA$	-	-	6	ns

### RATING AND CHARACTERISTIC CURVES ( BAV10 )

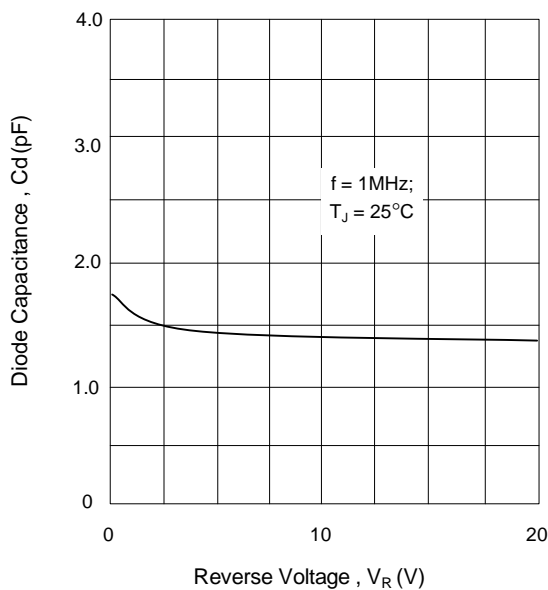
**FIG. 1 MAXIMUM PERMISSIBLE CONTINUOUS FORWARD CURRENT AS A FUNCTION OF AMBIENT TEMPERATURE.**



**FIG. 2 TYPICAL FORWARD VOLTAGE**



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



**FIG. 4 TYPICAL REVERSE CURRENT VS JUNCTION TEMPERATURE**

