

BAV19 ~ BAV21

FEATURES :

- switching speed: max. 50 ns
- For general purpose
- This diode is also available in other case styles including: the MiniMELF case with the type designation BAV101 to BAV103, the SOT-23 case with the type designation BAS19 to BAS21

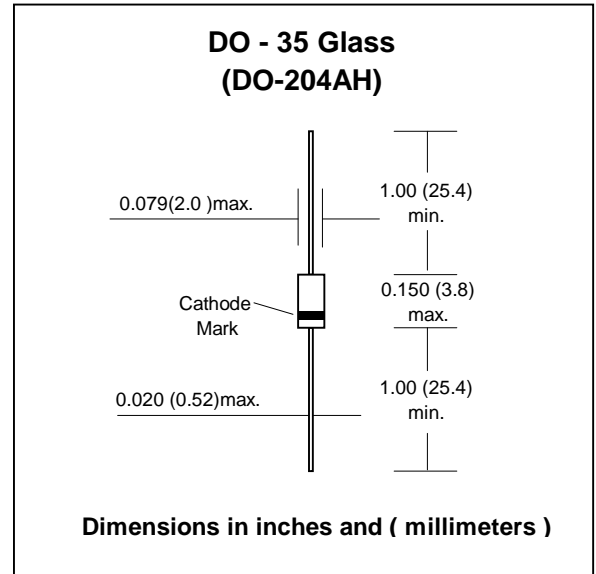
* Pb / RoHS Free

MECHANICAL DATA :

Case: DO-35 Glass Case

Weight: approx. 0.13g

SWITCHING DIODES



Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	BAV19	120	V
	BAV20	200	
	BAV21	250	
Maximum Continuous Reverse Voltage	BAV19	100	V
	BAV20	150	
	BAV21	200	
Maximum Rectified Current (Average) Half Wave Rectification with Resist. Load	$I_{F(AV)}$	200	mA
Maximum Continuous Current ⁽¹⁾	I_F	250	mA
Maximum Power Dissipation ⁽¹⁾	P_D	500	mW
Maximum Repetitive Peak Forward Current ⁽¹⁾	I_{FRM}	625	mA
Maximum Non-repetitive Peak Forward Current at t = 1s	I_{FSM}	1.0	A
Maximum Junction Temperature ⁽¹⁾	T_J	175	°C
Storage Temperature Range ⁽¹⁾	T_S	-65 to + 175	°C

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

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Current	I_R	$V_R = 100\text{ V}$	-	-	100	nA
		$V_R = 150\text{ V}$	-	-	100	
		$V_R = 200\text{ V}$	-	-	100	
Forward Voltage	V_F	$I_F = 100\text{ mA}$	-	-	1.0	V
Diode Capacitance	C_d	$f = 1\text{ MHz}; V_R = 0$	-	1.5	-	pF
Reverse Recovery Time	T_{rr}	$I_F = 30\text{ mA}, I_R = 30\text{ mA}$ $I_{RR} = 3\text{ mA}, R_L = 100\ \Omega$	-	-	50	ns

RATING AND CHARACTERISTIC CURVES (BAV19 ~ BAV21)

FIG. 1 ADMISSIBLE FORWARD CURRENT VERSUS AMBIENT TEMPERATURE

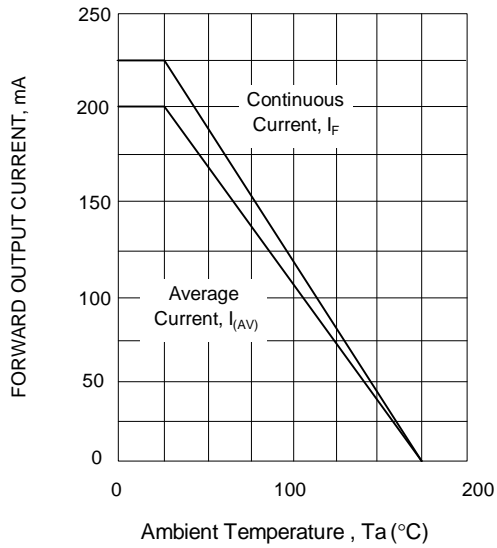


FIG. 2 TYPICAL FORWARD VOLTAGE

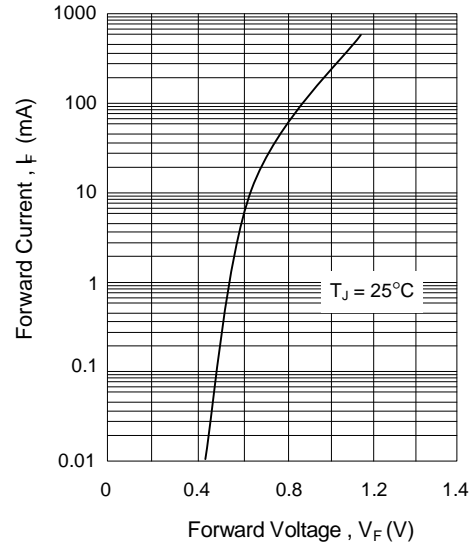


FIG. 3 TYPICAL DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE

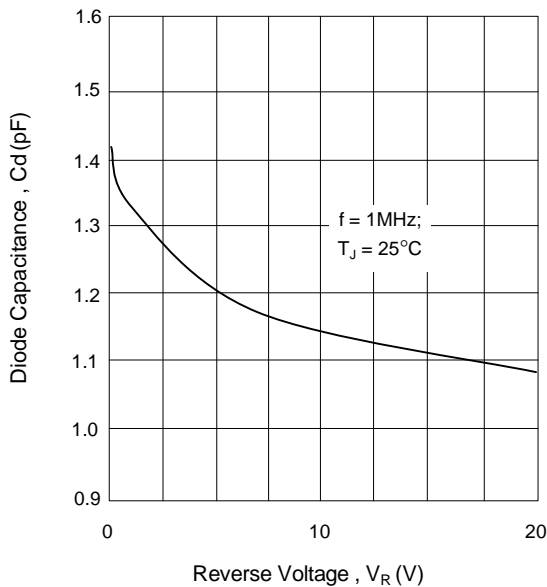


FIG. 4 TYPICAL REVERSE CURRENT VERSUS JUNCTION TEMPERATURE

