

BAV100 ~ BAV103

FEATURES :

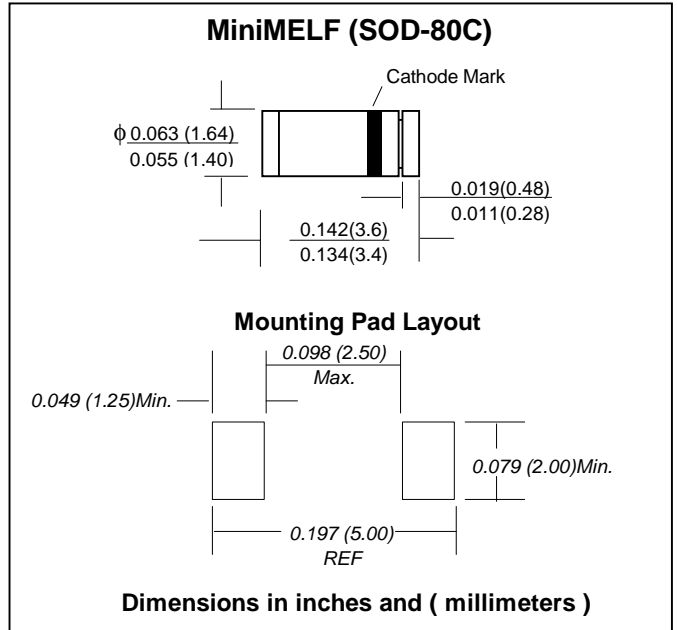
- Switching speed: max. 50 ns
- General application
- Continuous reverse voltage:
max. 50 V, 100 V, 150 V and 200 V respectively
- Repetitive peak reverse voltage:
max. 60 V, 120 V, 200 V and 250 V respectively
- Repetitive peak forward current: max. 625 mA.
- Pb / RoHS Free

MECHANICAL DATA :

Case: MiniMELF Glass Case (SOD-80)

Weight: approx. 0.05g

HIGH SPEED 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	V_{RRM}	BAV100	60
		BAV101	120
		BAV102	200
		BAV103	250
Maximum Continuous Reverse Voltage	V_R	BAV100	50
		BAV101	100
		BAV102	150
		BAV103	200
Maximum Repetitive Peak Forward Current	I_{FRM}	625	mA
Maximum Continuous Forward Current	I_F	250	mA
Maximum Surge Forward Current	I_{FSM}	at $t = 100\mu s$, $T_j = 25^\circ C$	3.0
		at $t = 1s$, $T_j = 25^\circ C$	1.0
Maximum Power Dissipation	P_D	400	mW
Maximum Junction Temperature	T_J	175	$^\circ C$
Storage Temperature Range	T_S	-65 to + 175	$^\circ C$

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Current	I_R	$V_R = 50 V$	-	-	100	nA
		$V_R = 100 V$	-	-	100	
		$V_R = 150 V$	-	-	100	
		$V_R = 200 V$	-	-	100	
Forward Voltage	V_F	$I_F = 100 mA$	-	-	1.0	V
		$I_F = 200 mA$	-	-	1.25	
Diode Capacitance	Cd	$f = 1MHz$; $V_R = 0$	-	-	5.0	pF
Reverse Recovery Time	T_{rr}	$I_F = 30 mA$ to $I_R = 30mA$ $R_L = 100 \Omega$; measured at $I_R = 3mA$	-	-	50	ns

RATING AND CHARACTERISTIC CURVES (BAV100 ~ BAV103)

FIG. 1 MAXIMUM FORWARD CURRENT VERSUS AMBIENT TEMPERATURE

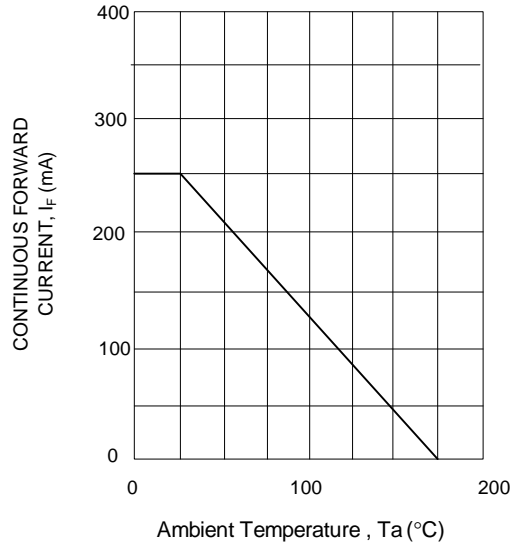


FIG. 2 TYPICAL FORWARD VOLTAGE

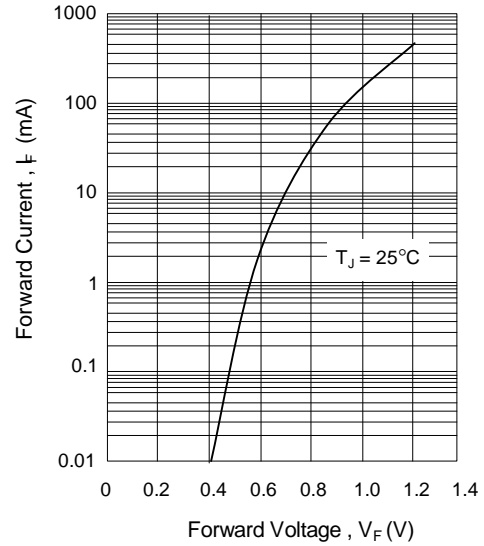


FIG. 3 TYPICAL DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE

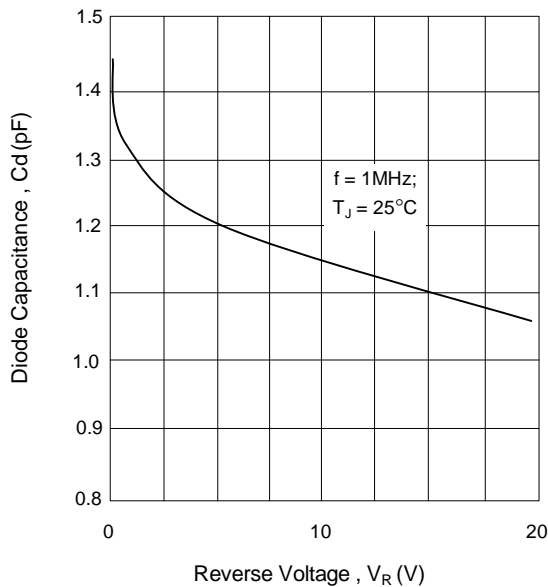


FIG. 4 TYPICAL REVERSE CURRENT VERSUS JUNCTION TEMPERATURE

