

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

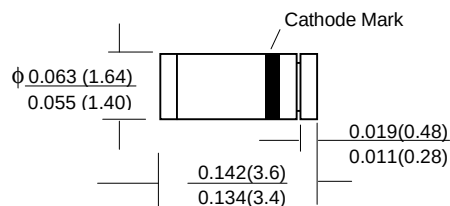
MECHANICAL DATA :

Case: MiniMELF Glass Case (SOD-80)

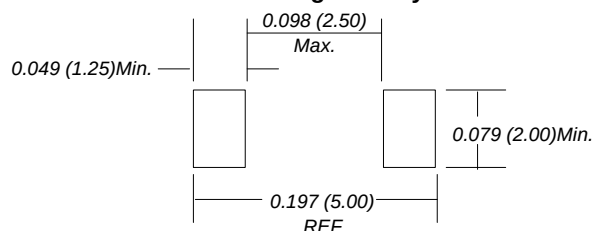
Weight: approx. 0.05g

HIGH SPEED SWITCHING DIODES

MiniMELF (SOD-80C)



Mounting Pad Layout



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}	60 120 200 250	V
Maximum Continuous Reverse Voltage	V_R	50 100 150 200	V
Maximum Repetitive Peak Forward Current	I_{FRM}	625	mA
Maximum Continuous Forward Current	I_F	250	mA
Maximum Surge Forward Current	I_{FSM}	3.0 1.0	A
Maximum Power Dissipation	P_D	400	mW
Maximum Junction Temperature	T_J	175	°C
Storage Temperature Range	T_S	-65 to + 175	°C

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

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

RATING AND CHARACTERISTIC CURVES (BAV100 ~ BAV103)

FIG. 1 MAXIMUM FORWARD CURRENT
VERSUS AMBIENT TEMPERATURE

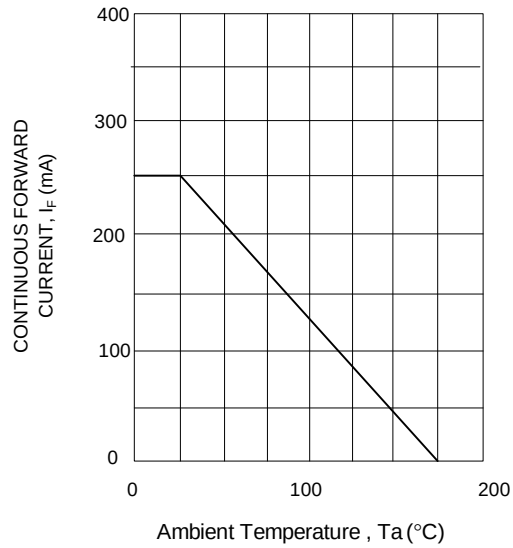


FIG. 2 TYPICAL FORWARD VOLTAGE

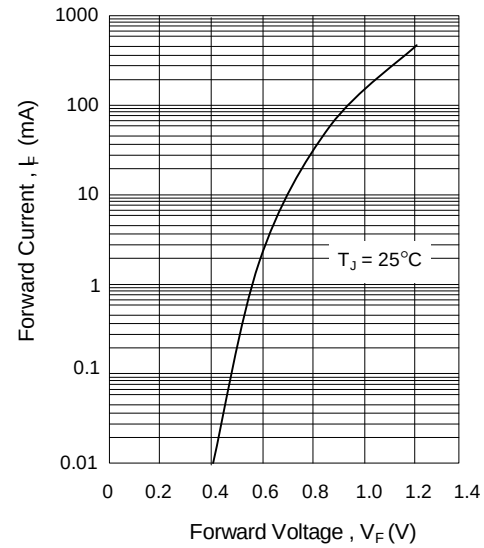


FIG. 3 TYPICAL DIODE CAPACITANCE AS
A FUNCTION OF REVERSE VOLTAGE

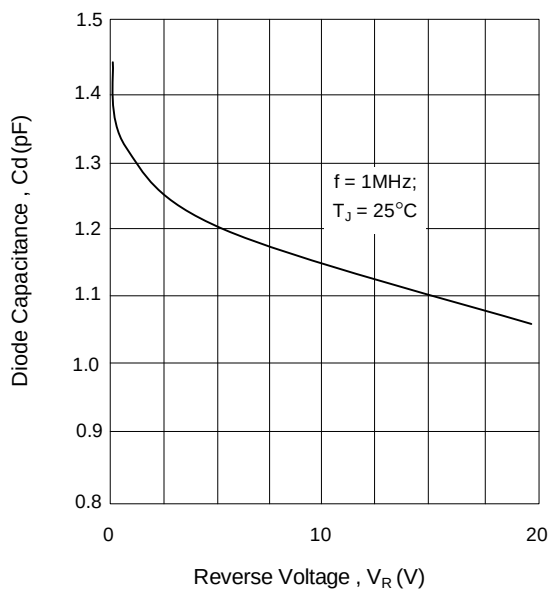


FIG. 4 TYPICAL REVERSE CURRENT
VERSUS JUNCTION TEMPERATURE

