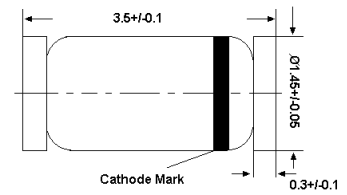


BAV101~BAV103

Silicon Epitaxial Planar Diodes

High Voltage Switching Diodes

LL-34



Glass case MiniMELF
Dimensions in mm

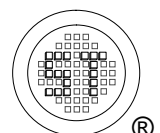
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	120	V
BAV101		200	
BAV102		250	
Reverse Voltage	V_R	100	V
BAV101		150	
BAV102		200	
Continuous Forward Current	I_F	250	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	1	A
at $t = 1$ s		3	
at $t = 100 \mu\text{s}$		9	
Total Power Dissipation	P_{tot}	400	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 175	$^\circ\text{C}$

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta JA}$	375	$^\circ\text{C}/\text{W}$

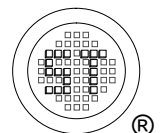
¹⁾ Valid provided that electrodes are kept at ambient temperature.



BAV101~BAV103

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	1 1.25	V
Reverse Current at $V_R = 100\text{ V}$ at $V_R = 150\text{ V}$ at $V_R = 200\text{ V}$ at $V_R = 100\text{ V}, T_j = 150^\circ\text{C}$ at $V_R = 150\text{ V}, T_j = 150^\circ\text{C}$ at $V_R = 200\text{ V}, T_j = 150^\circ\text{C}$	BAV101 BAV102 BAV103 BAV101 BAV102 BAV103	I_R 100 100 100 100 100 100	nA nA nA μA μA μA
Diode Capacitance at $V_R = 0, f = 1\text{ MHz}$	C_d	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}, I_{rr} = 3\text{ mA}, R_L = 100\ \Omega$	t_{rr}	50	ns



BAV101~BAV103

Electrical Characteristics Curves

Fig 1. Derating Curve

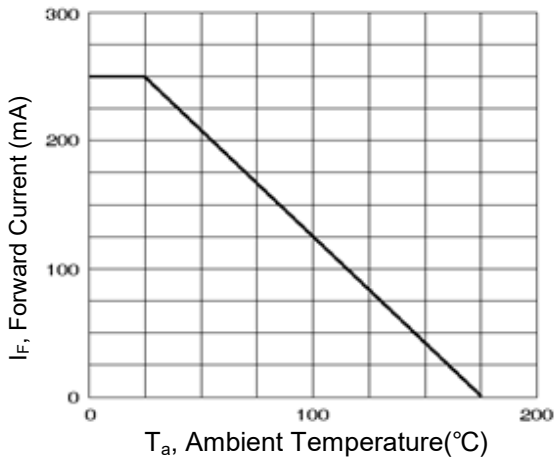


Fig 3. Cd vs. V_R

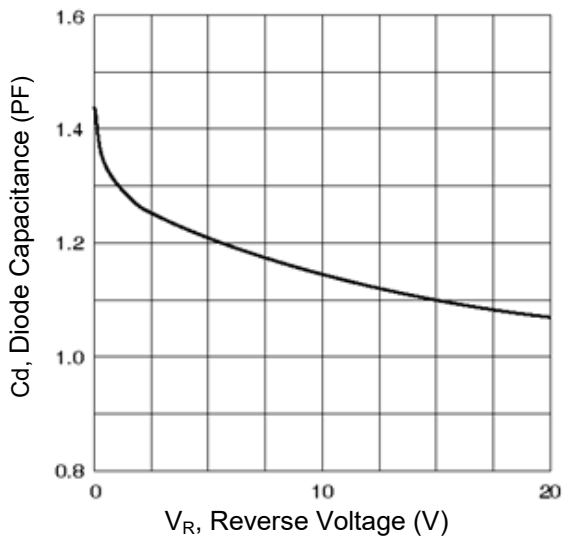


Fig 5. Reverse Characteristics

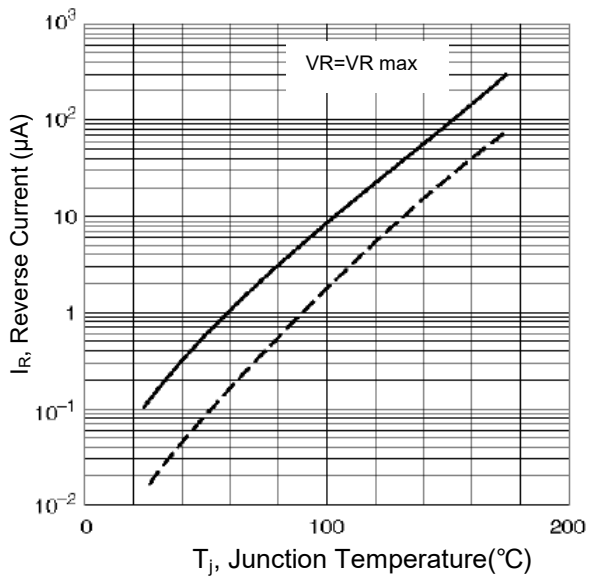


Fig 2. Forward Characteristics

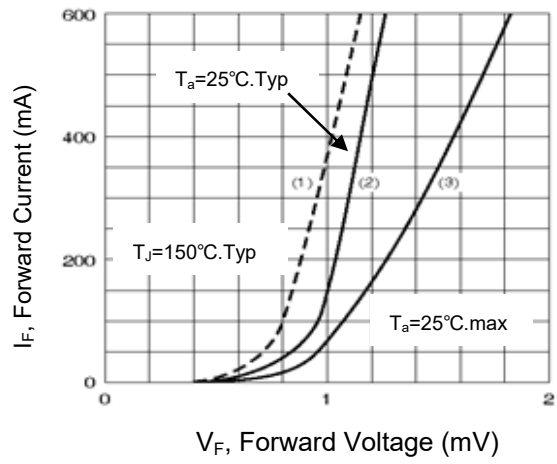


Fig 4. I_{FSM} vs. T_p

