



FUKUCOM COMPANY LTD.

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FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

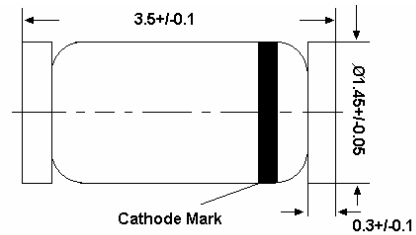
TEL: 852-2790 0314 FAX: 852-2790 0206

BAV100~BAV103

SILICON EPITAXIAL PLANAR DIODES

Features

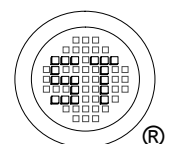
- Small – signal diodes
- For general purpose



Glass case MiniMELF
Dimensions in mm

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

	Symbol	Value	Unit
Reverse Voltage	V_R	50	V
BAV100		100	
BAV101		150	
BAV102		200	
BAV103			
Repetitive Peak Reverse Voltage	V_{RRM}	60	V
BAV100		120	
BAV101		200	
BAV102		250	
BAV103			
Forward DC Current at $T_{amb} = 25^\circ\text{C}$	I_F	250 ¹⁾	mA
Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_{amb} = 25^\circ\text{C}$ and $f \geq 50\text{Hz}$	$I_{F(AV)}$	200 ¹⁾	mA
Repetitive Peak Forward Current at $T_{amb} = 25^\circ\text{C}$, $f \geq 50\text{Hz}$ and $\theta = 180^\circ$	I_{FRM}	625 ¹⁾	mA
Surge Forward Current at $t=1\text{s}$, $T_j = 25^\circ\text{C}$ at $t=100\mu\text{s}$, $T_j = 25^\circ\text{C}$ at $t=1\mu\text{s}$, $T_j = 25^\circ\text{C}$	I_{FSM}	1	A
		3	
		9	
Power Dissipation	P_{tot}	400 ¹⁾	mW
Thermal Resistance Junction to Ambient	R_{thJA}	375	$^\circ\text{C/W}$
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +175	$^\circ\text{C}$
¹⁾ Valid provided that electrodes are kept at ambient temperature.			



Dated : 19/07/2005



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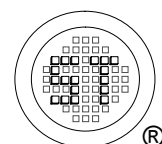
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Characteristics at $T_j = 25^\circ\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 100\text{mA}$	V_F	-	-	1.2	V
Leakage Current at $V_R = 50\text{V}$ at $V_R = 50\text{V}, T_j = 100^\circ\text{C}$ at $V_R = 100\text{V}$ at $V_R = 100\text{V}, T_j = 100^\circ\text{C}$ at $V_R = 150\text{V}$ at $V_R = 150\text{V}, T_j = 100^\circ\text{C}$ at $V_R = 200\text{V}$ at $V_R = 200\text{V}, T_j = 100^\circ\text{C}$	BAV100 BAV100 BAV101 BAV101 BAV102 BAV102 BAV103 BAV103	- - - - - - - -	- - - - - - - -	100 15 100 15 100 15 100 15	nA μA nA μA nA μA nA μA
Dynamic Forward Resistance $I_F = 10\text{mA}$	r_f	-	5	-	Ω
Capacitance at $V_R = 0, f = 1\text{MHz}$	C_{tot}	-	1.5	-	pF
Reverse Recovery Time from $I_F = 30\text{mA}$ to $I_R = 30\text{mA}, I_{\text{rr}} = 3\text{mA}, R_L = 100\Omega$	t_{rr}	-	-	50	ns



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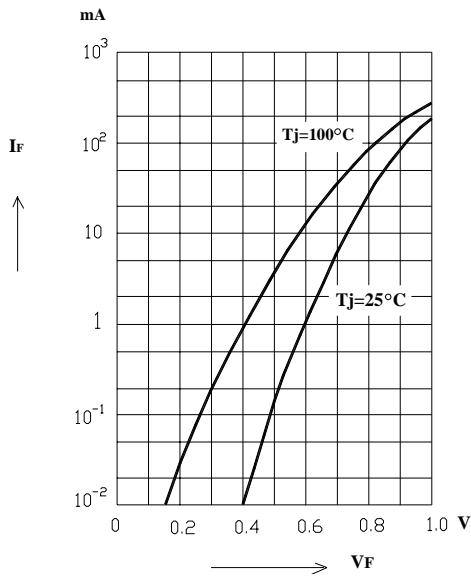
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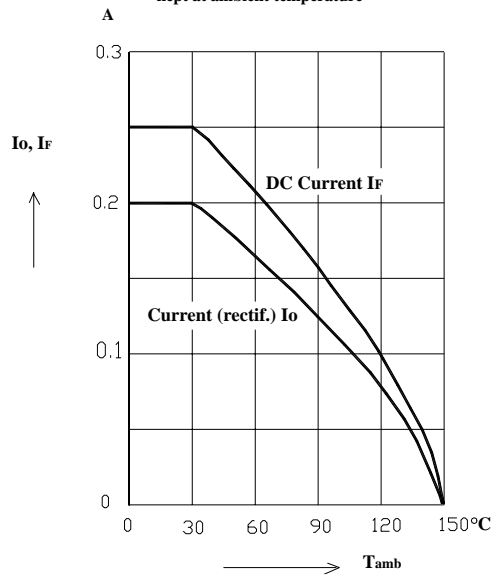
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Forward characteristics

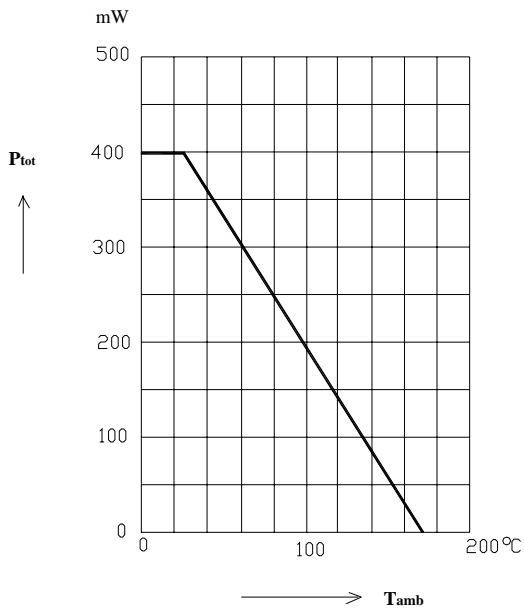


Admissible forward current versus ambient temperature

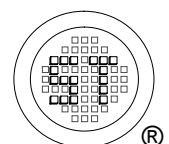
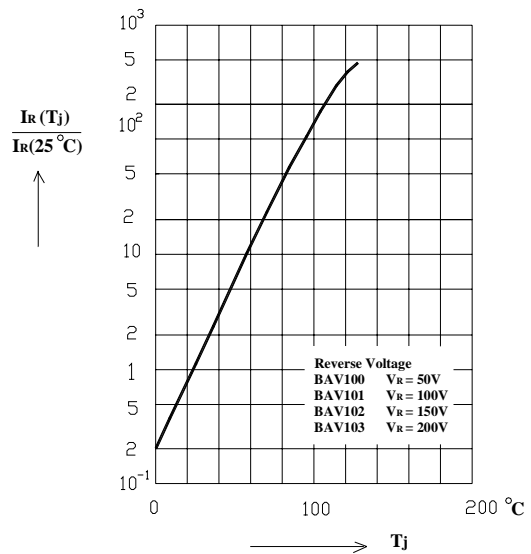
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Admissible power dissipation versus ambient temperature



Leakage current versus junction temperature



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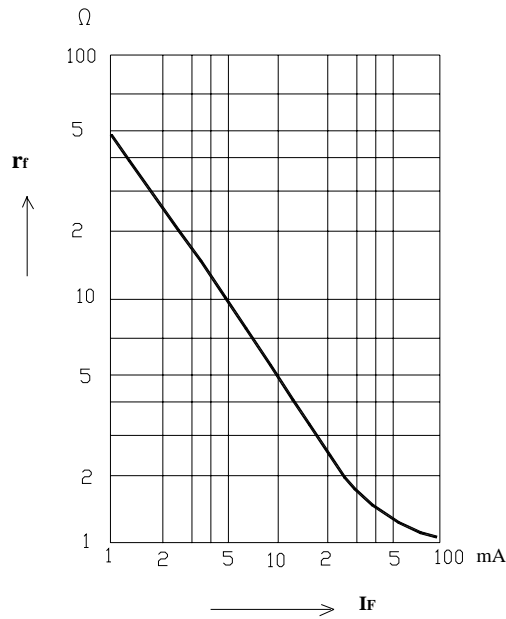
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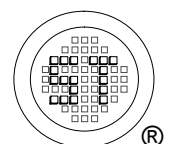
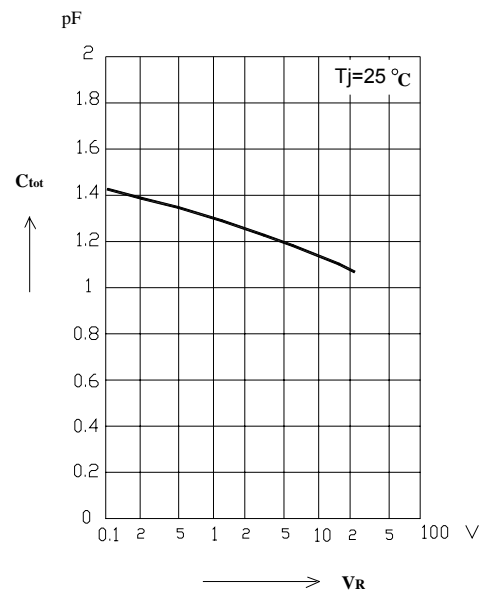
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**Dynamic forward resistance
versus forward current**



**Capacitance versus
reverse voltage**



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