

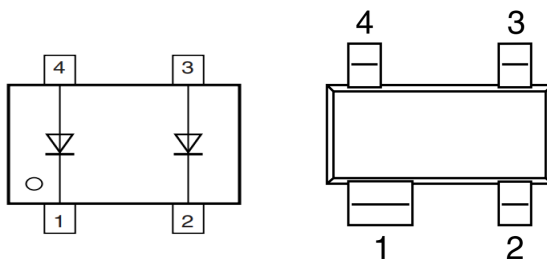


DONGGUAN NANJING ELECTRONICS LTD.,
SOT- 143 Plastic-Encapsulate Diodes

BAV23 Silicon Epitaxial Planar Diodes

High voltage switching diode

Marking : KT8



SOT-143

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

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	250	V
Reverse Voltage	V_R	200	V
Forward Current	$I_{F(AV)}$	400	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	1.7	A
at $t = 10\text{ ms}$		3	
at $t = 100\text{ }\mu\text{s}$		9	
at $t = 1\text{ }\mu\text{s}$			
Power Dissipation	P_{tot}	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	$^{\circ}\text{C/W}$
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	250	-	V
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	- -	1 1.25	V
Reverse Current at $V_R = 200\text{ V}, T_j = 25\text{ }^{\circ}\text{C}$ at $V_R = 200\text{ V}, T_j = 150\text{ }^{\circ}\text{C}$	I_R	- -	100 100	nA μA
Total Capacitance at $V_R = 0\text{ V}, f = 1\text{ MHz}$	C_{tot}	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100\text{ }\Omega$	t_{rr}	-	50	ns

Typical Characteristics

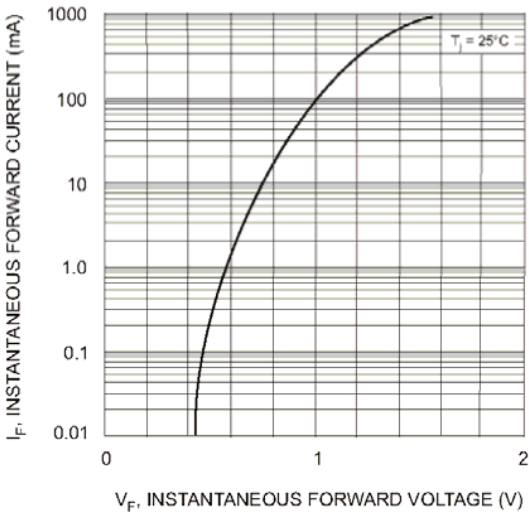


Fig. 1 Forward Characteristics

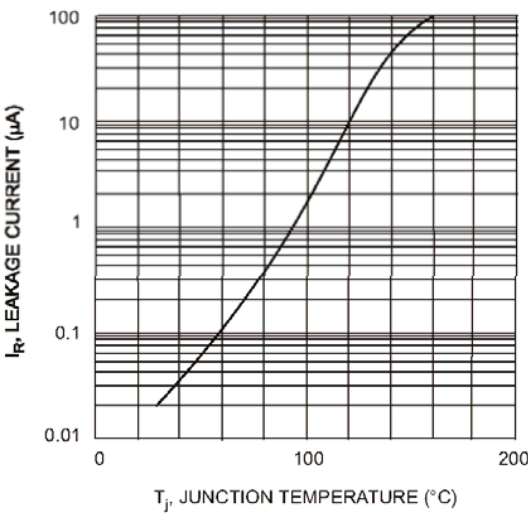


Fig. 2 Leakage Current vs Junction Temperature

SOT- 143 Package Outline Dimensions

Plastic surface mounted package

