BAV23A/C/S

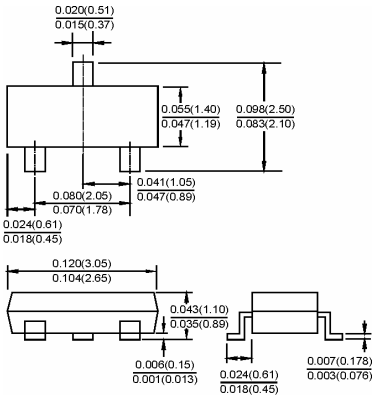
Surface mount switching diode

RoHS COMPLIANT

SOT-23

FEATURES

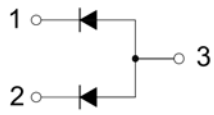
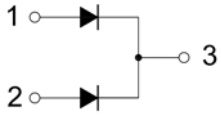
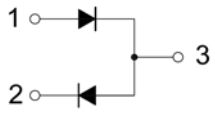
- ✧ Fast switching speed.
- ✧ Surface mount package ideally suited for
- ✧ Automatic insertion.
- ✧ For general purpose switching applications.
- ✧ High conductance.



Dimensions in inches and (millimeters)

APPLICATIONS

- ✧ High speed switching application.

BAV23A	BAV23C	BAV23S
		
MARKING: KT7	**MARKING: KT6**	**MARKING:KL31**
		

MAXIMUM RATING @ Ta=25. unless otherwise specified

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	250	V
Working peak reverse voltage DC reverse voltage	V_{RWM} V_R	200	V
RSM Reverse Voltage	$V_{R(RMS)}$	141	V
Forward Continuous Current(Max.)	I_{FM}	400	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs @ t = 100μs @ t = 10ms	I_{FSM}	 9.0 3.0 1.7	A
Repetitive Peak Forward Surge Current	I_{FRM}	625	mA
Power Dissipation	P_d	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	℃/W
Operating Junction Temperature Range	T_j	150	℃
Storage Temperature Range	T_{STG}	-65 to +150	℃

BAV23A/C/S

Surface mount switching diode

RoHS COMPLIANT

ELECTRICAL CHARACTERISTICS @ Ta=25. unless otherwise specified

Characteristic	Symbol	Min	MAX	UNIT	Test Condition
Reverse breakdown Voltage	$V_{(BR)R}$	250	-	V	I_R=100μA
Reverse Leakage Current	I_R	-	100	nA	V_R=200V
Forward voltage	V_F	- -	1 1.25	V	I_F=100mA I_F=200mA
Total Capacitance	C_T	-	5.0	pF	V_R=0V,f=1.0MHz
Reverse Recovery Time	t_{rr}	-	50	ns	I_F=I_R=30mAI_{rr}=0.1*I_R R_L=100Ω

TYPICAL CHARACTERISTICS @ Ta=25. unless otherwise specified

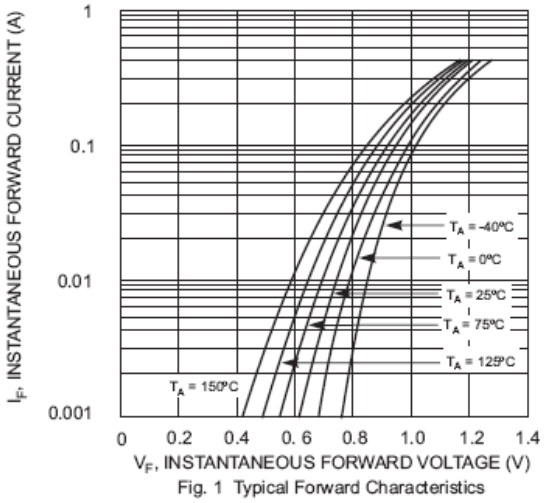


Fig. 1 Typical Forward Characteristics

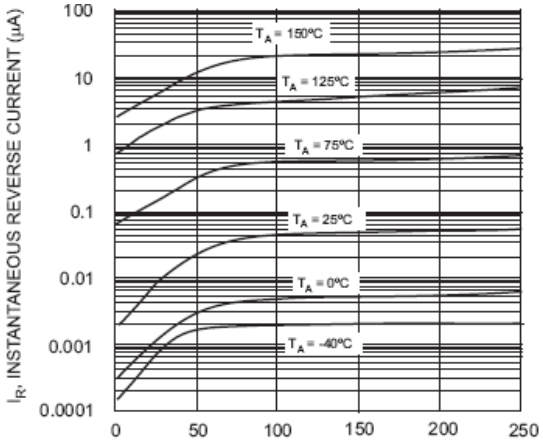


Fig. 2 Typical Reverse Characteristics

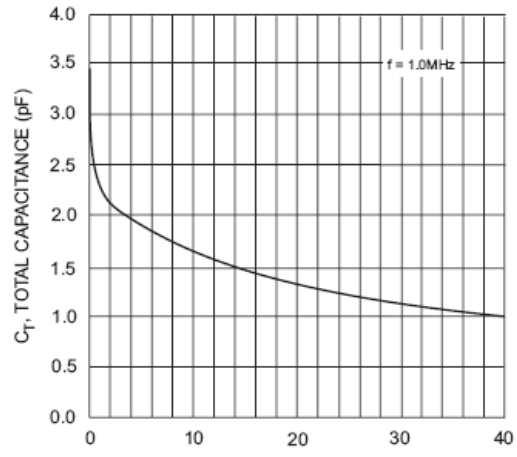


Fig. 3 Typical Capacitance vs. Reverse Voltage

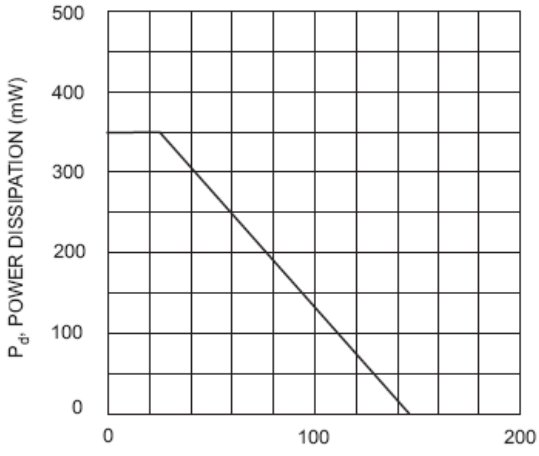


Fig. 4 Power Dissipation Derating

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOT-23	3000/REEL	90000	40X20X22	5.00	4.00