RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

BAV23/A/C/S

Switching Diode

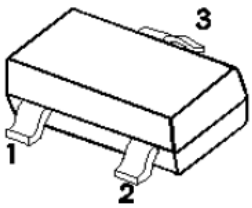
FEATURES

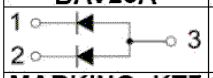
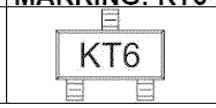
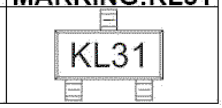
* Fast Switching Device (TRR <50nS)
* Power Dissipation of 350mW
* High Stability and High Reliability
* Low reverse leakage

MECHANICAL DATA

* Case: SOT-23 Small Outline Plastic Package
* Epoxy: Device has UL flammability classification 94V-O
* Mounting Position: Any

SOT-23



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

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	BAV23/A/C/S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	250	Volts
Maximum RMS Voltage	V_{RMS}	175	Volts
Maximum DC Blocking Voltage	V_{DC}	250	Volts
Power Dissipation	P_D	350	mW
Maximum Average Forward Rectified Current	I_O	225	mA
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	1.7	A
Current Squarad Time	I^2t	0.01	A^2S
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	357	^{0} C/ W
Capacitance (Note 2)	C_T	5	pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	^{0}C

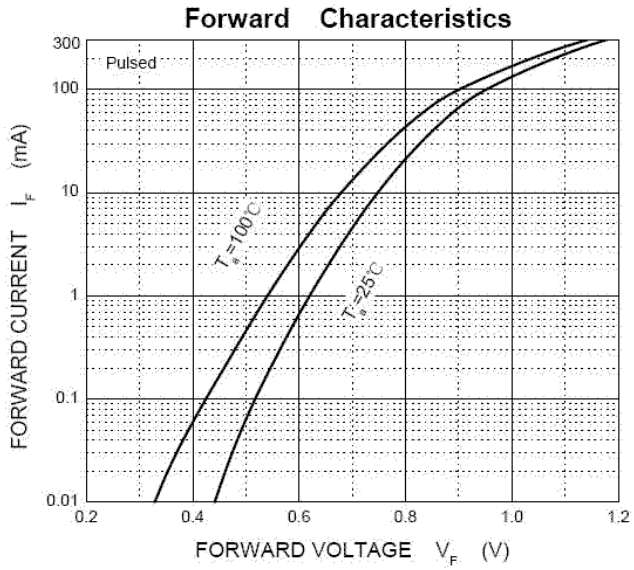
ELECTRICAL CHARACTERISTICS(@T_A=25 °C unless otherwise noted)

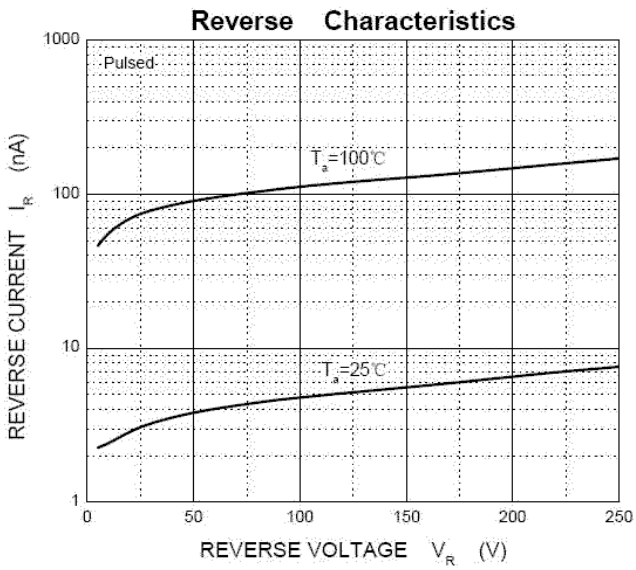
CHARACTERISTICS		SYMBOL	BAV23/A/C/S	UNITS
Maximum Instantaneous Forward Voltage	I_F = 100mA	V_F	1.0	Volts
	I_F = 200mA		1.25	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	0.1	uAmps
	@T_A = 100°C		100	
Maximum Reverse Recovery Time (Note 1)		trr	50	nSec

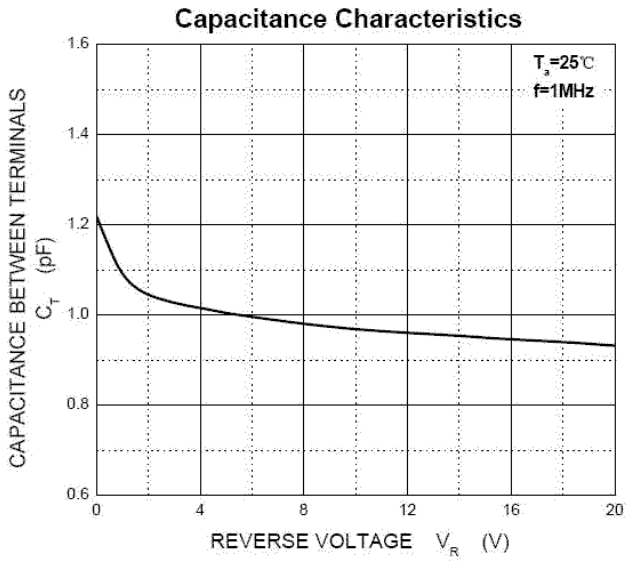
NOTES : 1. Test Conditions: I_F = 0.5A, I_R = -1.0A, I_{RR} = -0.25A
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. Typical Thermal Resistance : At 9.5mm lead lengths,PCB mounted.
4. "Fully ROHS complaint", "100% Sn plating (Pb-free)"
5. “P/N suffix V means AEC-Q101 qualified”.

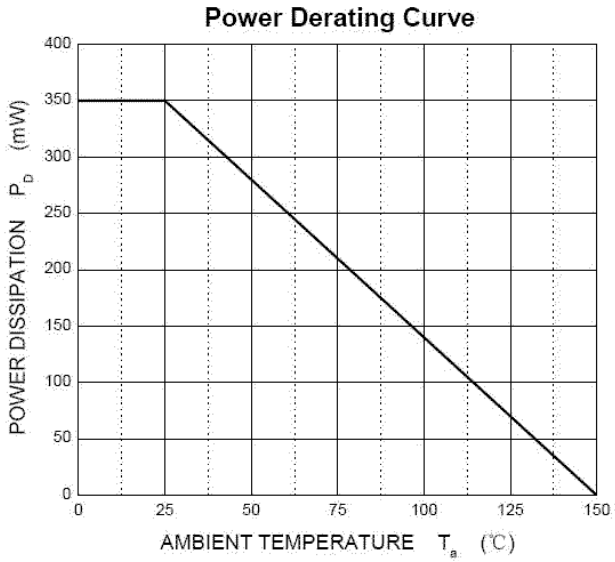
2017-12/8
REV: O

RATING AND CHARACTERISTICS CURVES (BAV23/A/C/S)



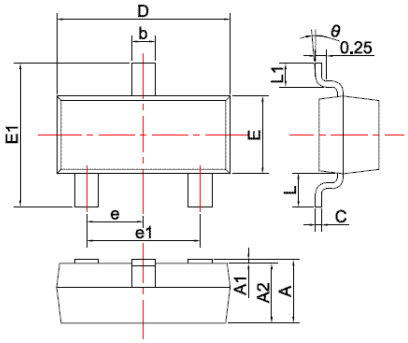






SOT-23 PACKAGE OUTLINE

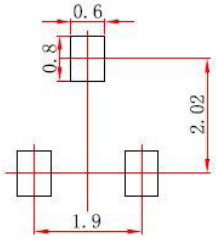
Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Unit: mm

Precautions: PCB Design(Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs)



Note:
1.Controlling dimension:In millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

PACKAGING OF DIODE

REEL PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOT-23/-3L	-T	3,000	---	---	178	438*438*220	180,000	---

DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.