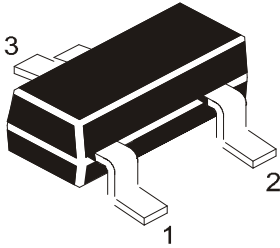


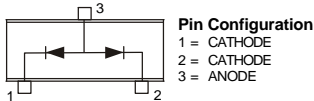
## SURFACE MOUNT FAST SWITCHING DIODES

**BAV23A  
BAV23C  
BAV23S**

**SOT-23  
Formed SMD Package**

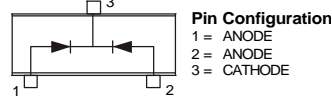


**BAV23A**



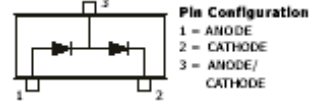
**Marking :- RA**

**BAV23C**



**Marking :- PZ**

**BAV23S**



**Marking :- PY**

### ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise specified)

DESCRIPTION	SYMBOL	VALUE	UNITS
Repetitive Peak Reverse Voltage	$V_{RRM}$	250	V
Working Peak Reverse Voltage	$V_{RWM}$	200	V
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	141	V
Forward Continuous Current	$I_{FM}$	400	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$		A
@ $t = 1.0 \mu\text{s}$		9.0	
@ $t = 100 \mu\text{s}$		3.0	
@ $t = 1.0 \text{ms}$		1.7	
Repetitive Peak Forward Surge Current (1)	$I_{FRM}$	625	mA
Power Dissipation (1)	$P_D$	350	mW
Thermal Resistance Junction to Ambient Air (1)	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150	$^\circ\text{C}$

### Electrical Characteristics ( $T_a=25^\circ\text{C}$ unless specified otherwise)

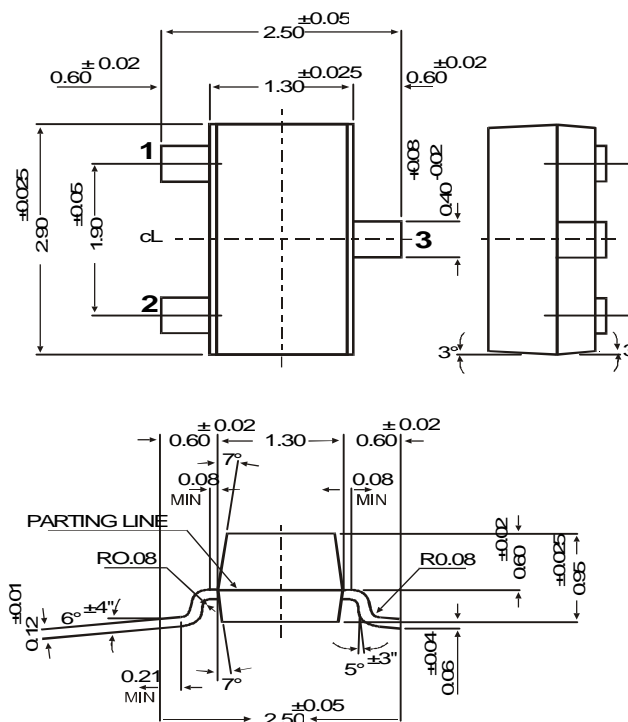
DESCRIPTION	SYMBOL	CONDITIONS	MIN	MAX	UNIT
Forward Voltage (2)	$V_F$	$I_F=100\text{mA}$		1.0	V
		$I_F=200\text{mA}$		1.25	V
Reverse Current @ Rated DC Blocking Voltage (2)	$I_R$	$T_j=25^\circ\text{C}$		100	nA
		$T_j=150^\circ\text{C}$		100	$\mu\text{A}$
Total Capacitance	$C_T$	$V_R=0, f=1\text{MHz}$		5	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=30\text{mA}, I_{rr}=1.0 \times I_R, R_L=100\Omega$		50	ns

#### Notes

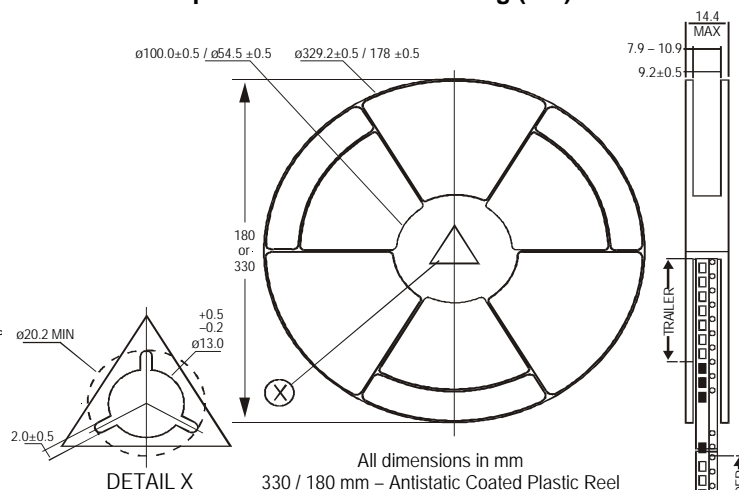
- (1). Short duration test pulse used to minimize self -heating effect.  
(2). Part mounted on FR-4 board.

**BAV23A  
BAV23C  
BAV23S**

**SOT-23 Formed SMD Package**



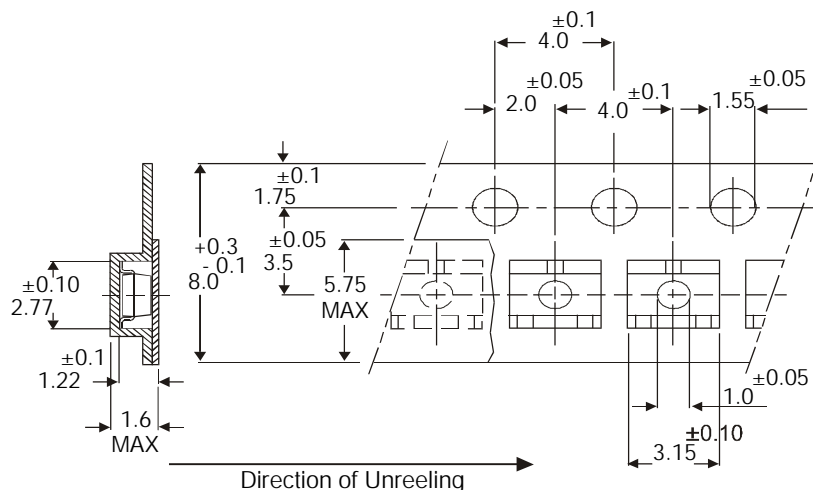
**SOT-23 Package Reel Information  
Reel Specifications for W Packing (13") and 7"**



**NOTES:**

1. The bandolier of 330 mm reel contains at least 10,000 devices.
2. The bandolier of 180 mm reel contains at least 3,000 devices.
3. No more than 0.5% missing devices / reel. 50 empty compartments for 330 mm reel. 15 empty compartments for 180 mm reel.
4. Three consecutive empty places might be found provided this gap is followed by 6 consecutive devices.
5. The carrier tape (leader) starts with at least 75 empty positions (equivalent to 330 mm). In order to fix the carrier tape a self adhesive tape of 20 to 50 mm is applied. At the end of the bandolier at least 40 empty positions (equivalent to 160 mm) are there.

**Tape Specification for SOT-23 Surface Mount Device**



All dimensions in mm

**Packing Detail**

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
SOT-23 T&R	3K/reel	136 gm/3K pcs	3" x 7.5" x 7.5"	12 K	17" x 15" x 13.5"	192 K	12 kgs
	10K/reel	415 gm/10K pcs	9" x 9" x 9"	51 K	19" x 19" x 19"	408 K	28 kgs
			13" x 13" x 0.5"	10 K	17" x 15" x 13.5"	300 K	16 kgs



Continental Device India Limited

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## Customer Notes

**BAV23A**  
**BAV23C**  
**BAV23S**

## Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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