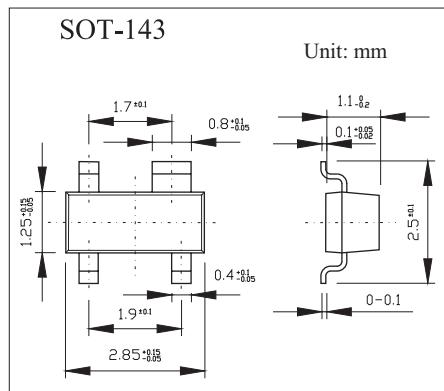


## BAV23

### ■ Features

- Small plastic SMD package
- Switching speed: max. 50 ns
- General application
- Continuous reverse voltage: max. 200 V
- Repetitive peak reverse voltage: max. 250 V
- Repetitive peak forward current: max. 625 mA.



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Test Condition	Min	Max	Unit
repetitive peak reverse voltage	V <sub>RRM</sub>			250	V
repetitive peak reverse voltage	V <sub>RRM</sub>	series connection		500	V
continuous reverse voltage	V <sub>R</sub>			200	V
continuous reverse voltage	V <sub>R</sub>	series connection		400	V
continuous forward current	I <sub>F</sub>	single diode loaded		225	mA
		double diode loaded		125	mA
repetitive peak forward current	I <sub>FRM</sub>	single diode loaded		625	mA
non-repetitive peak forward current	I <sub>FSM</sub>	square wave; T <sub>j</sub> = 25°C prior to surge			A
		t = 1 μ s		9	
		t = 100 μ s		3	
		t = 10 ms		1.7	
total power dissipation	P <sub>tot</sub>	T <sub>amb</sub> = 25°C		250	mW
storage temperature	T <sub>stg</sub>		-65	+150	°C
junction temperature	T <sub>j</sub>			150	°C
thermal resistance from junction to tie-point	R <sub>th j-tp</sub>			360	K/W
thermal resistance from junction to ambient	R <sub>th j-a</sub>			500	K/W

## **BAV23**

### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Condition	Min	Max	Unit
forward voltage	$V_F$	$I_F = 100 \text{ mA}$		1.0	V
		$I_F = 200 \text{ mA}$		1.25	V
reverse current	$I_R$	series connection			
		$I_F = 100 \text{ mA}$		2.0	V
		$I_F = 200 \text{ mA}$		2.5	V
forward voltage	$V_F$	$V_R = 200 \text{ V}$		100	nA
		$V_R = 200 \text{ V}; T_j = 150^\circ\text{C}$		100	$\mu\text{ A}$
reverse current	$I_R$	series connection			
		$V_R = 60 \text{ V}$		100	nA
		$V_R = 60 \text{ V}; T_j = 150^\circ\text{C}$		100	$\mu\text{ A}$
diode capacitance	$C_d$	$f = 1 \text{ MHz}; V_R = 0$		5	pF
		series connection; $f = 1 \text{ MHz}; V_R = 0$		2.5	pF
reverse recovery time	$t_{rr}$	when switched from $I_F = 30 \text{ mA}$ to $I_R = 30 \text{ mA}$ ; $R_L = 100 \Omega$ ; measured at $I_R = 30 \text{ mA}$		50	ns

### ■ Marking

Marking	L30
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