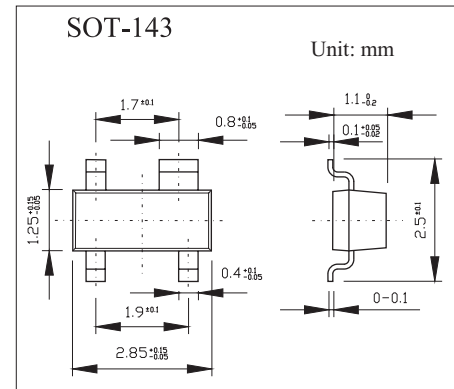


General Purpose Double Diode

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 $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Condition	Min	Max	Unit
repetitive peak reverse voltage	V_{RRM}			250	V
repetitive peak reverse voltage	V_{RRM}	series connection		500	V
continuous reverse voltage	V_R			200	V
continuous reverse voltage	V_R	series connection		400	V
continuous forward current	I_F	single diode loaded		225	mA
		double diode loaded		125	mA
repetitive peak forward current	I_{FRM}	single diode loaded		625	mA
non-repetitive peak forward current	I_{FSM}	square wave; $T_j = 25^\circ\text{C}$ prior to surge			A
		$t = 1 \mu\text{s}$		9	
		$t = 100 \mu\text{s}$		3	
		$t = 10 \text{ms}$		1.7	
total power dissipation	P_{tot}	$T_{amb} = 25^\circ\text{C}$		250	mW
storage temperature	T_{stg}		-65	+150	$^\circ\text{C}$
junction temperature	T_j			150	$^\circ\text{C}$
thermal resistance from junction to tie-point	$R_{th\ j-tp}$			360	K/W
thermal resistance from junction to ambient	$R_{th\ j-a}$			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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