SMD Type Diodes

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.

SOT-143 Unit: mm 1.7*01 0.8*815 0.1*82 0-0.1 2.85*888

■ Absolute Maximum Ratings Ta = 25°C

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Parameter	Symbol	Test Condition	Min	Max	Unit
repetitive peak reverse voltage	VRRM			250	V
repetitive peak reverse voltage	VRRM	series connection		500	V
continuous reverse voltage	VR			200	V
continuous reverse voltage	VR	series connection		400	V
continuous forward current	lF	single diode loaded		225	mA
		double diode loaded		125	mA
repetitive peak forward current	IFRM	single diode loaded		625	mA
non-repetitive peak forward current	IFSM	square wave; T _j = 25°Cprior to surge			A
		t = 1 μs		9	
		t = 100 μs		3	
		t = 10 ms		1.7	
total power dissipation	Ptot	Tamb = 25°C		250	mW
storage temperature	Tstg		-65	+150	$^{\circ}$
junction temperature	Tj			150	°C
thermal resistance from junction to tie-point	Rth j-tp			360	K/W
thermal resistance from junction to ambient	Rth j-a			500	K/W

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BAV23

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Condition	Min	Max	Unit
forward voltage	VF	IF = 100 mA		1.0	V
	VF	IF = 200 mA		1.25	V
reverse current		series connection			
	lR	IF = 100 mA		2.0	V
		IF = 200 mA		2.5	V
forward voltage	VF	V _R = 200 V		100	nA
	VF	VR = 200 V; Tj = 150℃		100	μ А
reverse current		series connection			
	IR	VR = 60 V		100	nA
		VR = 60 V;Tj = 150℃		100	μ А
diode capacitance	Cd	f = 1 MHz; V _R = 0		5	pF
	Ca	series connection; f = 1 MHz;VR = 0		2.5	pF
reverse recovery time	trr	when switched from IF = 30 mA to,IR = 30 mA;		50	ns
	trr	RL = 100 Ω ; measured at IR = 30 mA		30	

Marking

Marking	L30