

SMD Type

Diodes

High-Speed Double Diode Array
BAV70S

■ Features

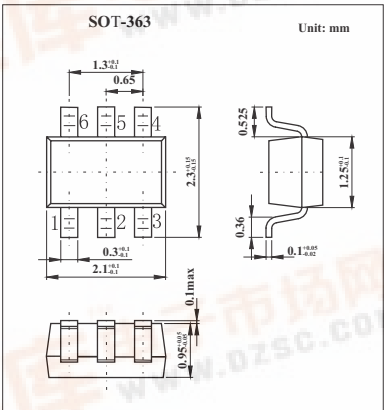
- Small plastic SMD package
- High switching speed: max. 4 ns
- Continuous reverse voltage: max. 75 V
- Repetitive peak reverse voltage: max. 85 V
- Repetitive peak forward current: max. 450 mA.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Max	Unit
Per diode					
repetitive peak forward current	VRRM			85	V
continuous reverse voltage	VR			75	V
continuous forward current	IF	single diode loaded;		250	mA
		all diodes loaded;		100	mA
repetitive peak forward current	IFRM			450	mA
non-repetitive peak forward current	IFSM	square wave; $T_j = 25^\circ\text{C}$ prior to surge;		4	A
		$t = 1\ \mu\text{s}$		1	
		$t = 1\ \text{ms}$		0.5	
total power dissipation	Ptot	$T_s = 60^\circ\text{C}$; note 1		350	mW
storage temperature	Tstg		-65	+150	$^\circ\text{C}$
junction temperature	T_j		-65	+150	$^\circ\text{C}$
thermal resistance from junction to ambient	Rth j-a			255	K/W

Note

1. One or more diodes loaded.



BAV70S

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Conditions	Max	Unit
forward voltage	VF	IF = 1 mA	200	mV
		IF = 10 mA	260	
		IF = 50 mA	340	
		IF = 150 mA	420	
reverse current	IR	VR = 25 V	30	nA
		VR = 75 V	2.5	μ A
		VR = 25 V; Tj = 150°C	60	μ A
		VR = 75 V; Tj = 150°C	100	μ A
diode capacitance	Cd	VR = 0; f = 1 MHz;	1.5	pF
reverse recovery time	trr	when switched from IF = 10 mA to IR = 10 mA; RL = 100 Ω ; measured at IR = 1 mA;	4	ns
forward recovery voltage	Vfr	when switched from IF = 10 mA; tr = 20 ns	1.75	V

■ Marking

Marking	A4t
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