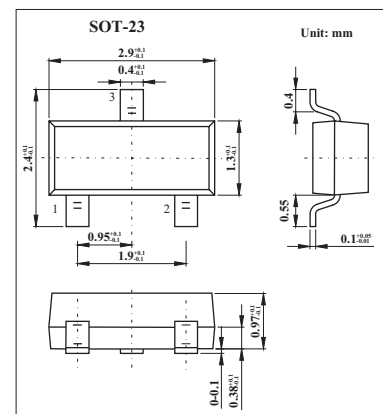


Low-leakage double diode

BAV170

■ Features

- Plastic SMD package
- Low leakage current: typ. 3 pA
- Switching time: typ. 0.8 μ s
- Continuous reverse voltage: max. 75 V
- Repetitive peak reverse voltage: max. 85 V
- Repetitive peak forward current: max. 500 mA.

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

Parameter	Symbol	Conditions	Min	Max	Unit
Repetitive peak reverse voltage	VRRM			85	V
Continuous reverse voltage	VR			75	V
Continuous forward current	IF	single diode loaded		215	mA
		double diode loaded		125	
Repetitive peak forward current	IFRM			500	mA
Non-repetitive peak forward current	IFSM	square wave; $T_j = 25^\circ\text{C}$ prior to surge			A
		$t = 1 \mu\text{s}$		4	
		$t = 1 \text{ms}$		1	
		$t = 1 \text{s}$		0.5	
Total power dissipation	Ptot	$T_{a \text{ mb}} = 25$		250	mW
Storage temperature	Tstg		-65	+150	$^\circ\text{C}$
Junction temperature	Tj			150	$^\circ\text{C}$
thermal resistance from junction to tie-point	Rth j-t p			360	K/W
thermal resistance from junction to ambient	Rth j-a			500	K/W

BAV170■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Typ	Max	Unit
Forward voltage	V_F	$I_F = 1\text{ mA}$		900	mV
		$I_F = 10\text{ mA}$		1000	
		$I_F = 50\text{ mA}$		1100	
		$I_F = 150\text{ mA}$		1250	
Reverse current	I_R	$V_R = 75\text{ V}$	0.003	5	nA
		$V_R = 75\text{ V}; T_j = 150^\circ\text{C}$	3	80	
Diode capacitance	C_d	$f = 1\text{ MHz}; V_R = 0;$	2		pF
Reverse recovery time	t_{rr}	when switched from $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA};$ $R_L = 100\ \Omega$; measured at $I_R = 1\text{ mA};$	0.8	3	μs

■ Marking

Marking	JXp
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