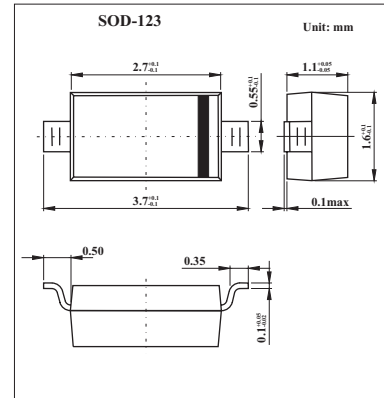


Surface Mount Switching Diode

KAV19W - KAV21W
(BAV19W - BAV21W)

■ Features

- Fast switching speed
- Surface mount package Ideally suited for automatic insertion
- For general purpose switching applications

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

Parameter	Symbol	KAV19W	KAV20W	KAV21W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	120	200	250	V
Peak repetitive peak reverse voltage	V_{RRM}				
Working peak	V_{RWM}	100	150	200	V
DC blocking voltage	V_R				
RMS reverse voltage	$V_{R(RMS)}$	71	106	141	V
Average Rectified Output Current	I_O		200		mA
Forward continuous current	I_{FM}		400		mA
Non-Repetitive Peak Forward Surge Current @ $t=1.0\ \mu\text{s}$	I_{FSM}		2.5		A
@ $t=1.0\text{s}$			0.5		
Non-Repetitive Peak Forward Surge Current	I_{FRM}		625		mA
Power dissipation	P_d		250		mW
Thermal resistance junction to ambient	$R_{\theta JA}$		500		$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}		-65 to +150		$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage*	$V_{(BR)R}$	$I_R = 100\ \mu\text{A}$	120			V
			200			
			250			
Forward Voltage *	V_{FM}	$I_F = 100\text{mA}$ $I_F = 200\text{mA}$			1.0 1.25	V
Peak Reverse Current	I_{RM}	$T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$			100 15	nA μA
Junction Capacitance	C_j	$V_R = 0\text{V}, f = 1.0\text{MHz}$			5.0	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 30\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\ \Omega$			50	ns

* Short duration pulse test used to minimize self-heating effect.

■ Marking

NO.	KAV19W	KAV20W	KAV21W
Marking	A8 or T2 or T3	T2 or T3	T3