

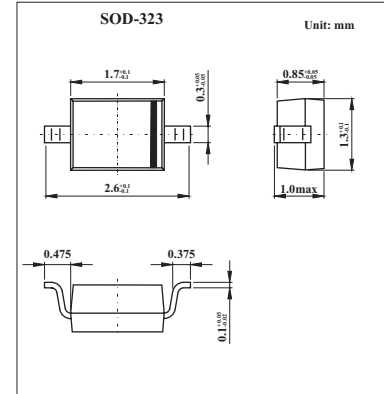
## Surface Mount Fast Switching Diode

### KAV19WS - KAV21WS

#### (BAV19WS - BAV21WS)

#### ■ Features

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



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	KAV19WS	KAV20WS	KAV21WS	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	120	200	250	V
Peak repetitive peak reverse voltage	V <sub>RRM</sub>				
Working peak	V <sub>RWM</sub>	100	150	200	V
DC blocking voltage	V <sub>R</sub>				
RMS reverse voltage	V <sub>R(RMS)</sub>	71	106	141	V
Average Rectified Output Current	I <sub>o</sub>		200		mA
Forward continuous current	I <sub>FM</sub>		400		mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μs	I <sub>FSM</sub>		2.5		A
@t=1.0s			0.5		
Non-Repetitive Peak Forward Surge Current	I <sub>FRM</sub>		625		mA
Power dissipation	P <sub>d</sub>		200		mW
Thermal resistance junction to ambient	R <sub>θJA</sub>		625		°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>		-65 to +150		°C

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage*	KAV19WS	I <sub>R</sub> =100 μA	120			V
	KAV20WS		200			
	KAV21WS		250			
Forward Voltage *	V <sub>FM</sub>	I <sub>F</sub> = 100mA I <sub>F</sub> = 200mA			1.0 1.25	V
Peak Reverse Current @ Rated DC Blocking Voltage*	I <sub>RM</sub>	T <sub>j</sub> = 25°C T <sub>j</sub> = 100°C			100 15	nA μA
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> = 0V, f = 1.0MHz			5.0	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 30mA, I <sub>rr</sub> = 0.1 X I <sub>R</sub> , R <sub>L</sub> = 100 Ω			50	ns

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

#### ■ Marking

NO.	KAV19WS	KAV20WS	KAV21WS
Marking	A8 or T2 or T3	T2 or T3	T3