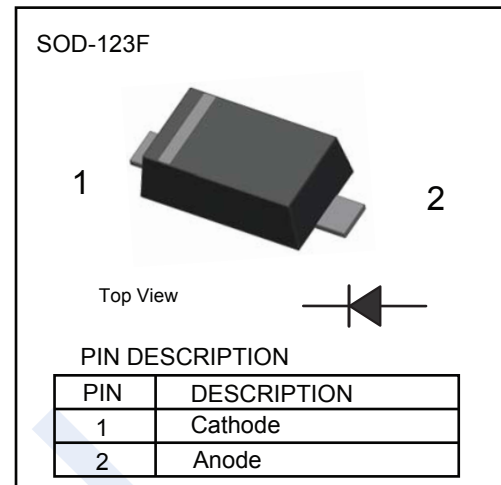


Switching Diodes

BAV100 ~ BAV103 (KAV100 ~ KAV103)

■ Features

- Fast Switching Speed
- For General Purpose Switching Applications.

■ Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$, unless otherwise specified)

Parameter	Symbol	BAV100	BAV101	BAV102	BAV103	Unit
Repetitive peak reverse voltage	V_{RRM}	60	120	200	250	V
Reverse Voltage	V_R	50	100	150	200	
Forward continuous current	I_F	250				mA
Repetitive peak forward current	I_{FRM}	620				
Peak Forward Surge Current	I_{FSM}	1				A
Power dissipation	P_{tot}	500				mW
Thermal resistance junction to lead	R_{thJL}	350				$^\circ\text{C}/\text{W}$
Thermal resistance junction to ambient air ^{*1}	R_{thJA}	500				
Junction Temperature	T_J	150				$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150				

*1. On PC board 50 mm x 50 mm x 1.6 mm

■ Electrical Characteristics ($T_a = 25^\circ\text{C}$, unless otherwise specified)

Parameter		Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	BAV100	$V_{(BR)}$	$I_R = 100 \mu\text{A}$, $tp/T = 0.01$, $tp = 0.3 \text{ ms}$	60			V
	BAV101			120			
	BAV102			200			
	BAV103			250			
Reverse current	BAV100	I_R	$V_R = 50 \text{ V}$			100	nA
	BAV101		$V_R = 100 \text{ V}$			100	
	BAV102		$V_R = 150 \text{ V}$			100	
	BAV103		$V_R = 200 \text{ V}$			100	
Forward voltage		V_F	$I_F = 100 \text{ mA}$			1	V
Diode capacitance		C_D	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$, $V_{HF} = 50 \text{ mV}$		1.5		pF
Differential forward current		r_f	$I_F = 10 \text{ mA}$		5		Ω
Reverse recovery time		t_{rr}	$I_F = I_R = 30 \text{ mA}$, $i_R = 3 \text{ mA}$, $R_L = 100 \Omega$			50	ns

Switching Diodes

BAV100 ~ BAV103 (KAV100 ~ KAV103)

■ Typical Characteristics

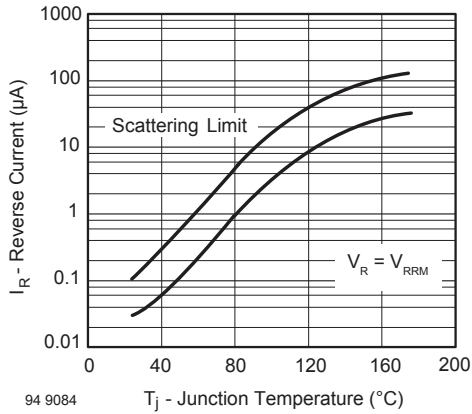


Fig. 1 - Reverse Current vs. Junction Temperature

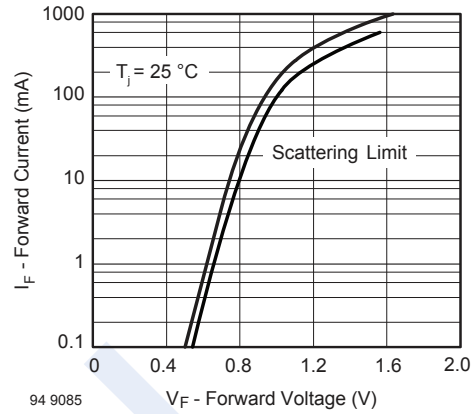


Fig. 2 - Forward Current vs. Forward Voltage

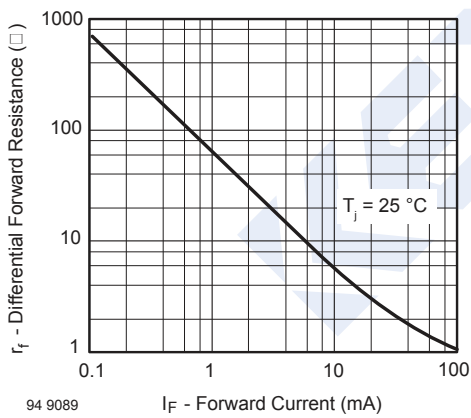


Fig. 3 - Differential Forward Resistance vs. Forward Current

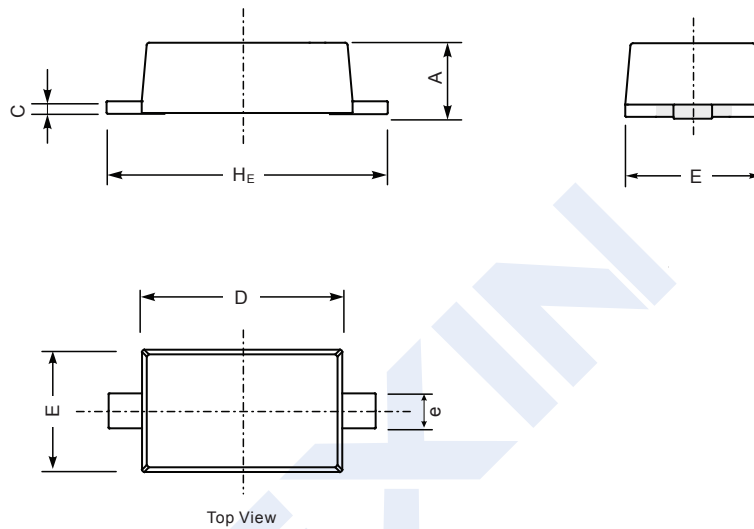
Switching Diodes

BAV100 ~ BAV103 (KAV100 ~ KAV103)

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-123F



UNIT		A	C	D	E	e	H _E
mm	max	1.0	0.20	2.7	1.7	0.7	3.7
	min	0.8	0.05	2.5	1.5	0.5	3.3
mil	max	39	8	106	67	28	146
	min	31	2	98	59	20	130

■ The Recommended Mounting Pad Size

