

Small Signal Product

High Voltage Fast Switching Diode

FEATURES

- Fast switching device($T_{rr}<50nS$)
- Surface device type mounting
- Moisture sensitivity level 1
- Low reverse leakage
- Pb free version and RoHS compliant
- Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code


SOD-123

MECHANICAL DATA

- Case : Bend lead SOD-123 small outline plastic package
- Terminal : Matte tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- High temperature soldering guaranteed : 260°C/10s
- Polarity : Indicated by cathode band
- Weight : 10.5 ± 0.5 mg



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)					
PARAMETER	SYMBOL	VALUE			UNITS
		BAV19W-G	BAV20W-G	BAV21W-G	
Reverse voltage	V_R	100	150	250	V
Peak reverse voltage	V_{RM}	120	200	250	V
Power dissipation	P_D	500			mW
Average rectified output current	I_O	200			mA
Repetitive peak forward current	I_{FM}	400			mA
Non-repetitive peak forward surge current @ $t_p=1.0ms$; $T_A=25^\circ\text{C}$	I_{FSM}	2.5			A
Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +150			$^\circ\text{C}$

PARAMETER	SYMBOL	MIN	MAX	UNITS
Reverse voltage	V_{BR}	120	-	V
		200	-	
		250	-	
Reverse leakage current	I_R	-	0.1	uA
		-		
		-		
Forward voltage	V_F	-	1.00	V
		-	1.25	
Junction capacitance	C_j	-	5.0	pF
Reverse Recovery Time	T_{rr}	-	50	nS

 Note 1 : Test condition : $I_F=I_R=30mA$, $R_L=100\Omega$, $I_{RR}=3mA$

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ORDERING INFORMATION

PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING	MANUFACTURE CODE
BAVxxW-G (Note 1)	RB	Suffix "G"	SOD-123	3000 / 7" Reel	(Note 2)

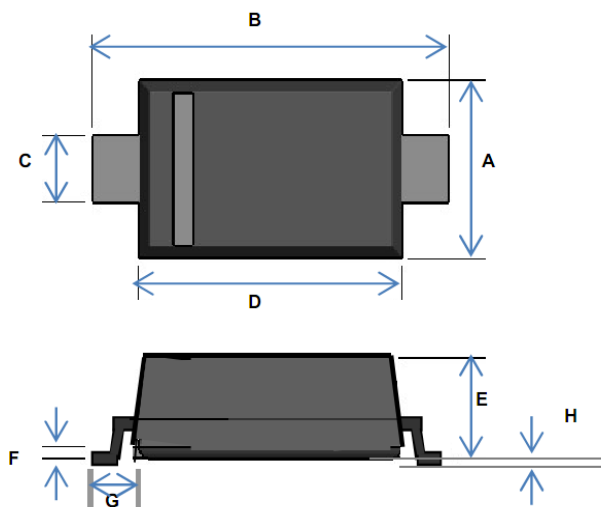
Note 1 : "xx" defines voltage from 150V (BAV19W-G) to 200V (BAV21W-G)

Note 2: Manufacture special control, if empty means no special control requirement.

EXAMPLE

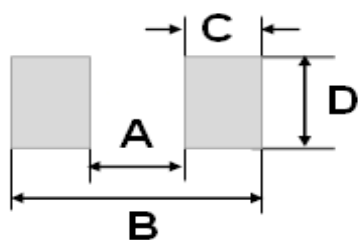
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	MANUFACTURE CODE	DESCRIPTION
BAV19W-G RB	BAV19W-G	RB			
BAV19W-G RBG	BAV19W-G	RB	G		Green compound
BAV19W-G RB	BAV19W-G	RB		N0	
BAV19W-G RBG	BAV19W-G	RB	G	N0	Green compound

DIMENSIONS



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	1.4	1.8	0.055	0.071
B	3.55	3.85	0.140	0.152
C	0.45	0.7	0.018	0.028
D	2.55	2.85	0.100	0.112
E	0.95	1.35	0.037	0.053
F	0.05	0.15	0.002	0.006
G	0.5 REF		0.02 REF	
H	-	0.1	-	0.004

Suggested PAD Layout



DIM.	Unit(mm)	Unit(inch)
	Typ.	Typ.
A	2.36	0.093
B	4.19	0.165
C	0.91	0.036
D	1.22	0.048