



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Small Signal Product

410mW High Voltage SMD Switching Diode

FEATURES

- These diodes are also available in DO-35, LL34 Package
- Surface Mount Device Type
- Moisture sensitivity level 1
- Matte Tin (Sn) lead finish with Nickel (Ni) underplate
- Pb free version and RoHS compliant
- Packing code with suffix "G" means green compound (halogen-free)


SOD-123F


MECHANICAL DATA

- Case: Flat lead SOD-123F 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: 4.85 ± 0.5mg



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P _D	410	mW
Repetitive Peak Reverse Voltage	V _{RRM}	250	V
Repetitive Peak Forward Current	I _{FRM}	625	mA
Mean Forward Current	I _O	200	mA
Non-Repetitive Peak Forward Surge Current Pulse Width = 1 μs Pulse Width = 1 s	I _{FSM}	4	A
		1	
Thermal Resistance (Junction to Ambient)	R _{θJA}	375	°C/W
Junction and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

PARAMETER	SYMBOL	MIN	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	V _(BR)	120	-	V
		200	-	
		250	-	
Forward Voltage I _F = 100 mA I _F = 200 mA	V _F	-	1	V
		-	1.25	
Reverse Leakage Current (Note 2)	I _R	-	100	nA
Junction Capacitance V _R = 0, f = 1.0 MHz	C _J	-	5	pF
Reverse Recovery Time (Note 3)	t _{rr}	-	50	ns

Note 1 : Test condition : I_R= 100μA

Note 2 : Test condition : BAV19W @ V_R=100V, BAV20W @ V_R=150V, BAV21W @ V_R=200V

Note 3 : Test condition : I_F= I_R= 30mA, R_L=100Ω, I_{rr}=3mA

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RATINGS AND CHARACTERISTICS CURVES

($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Fig. 1 Admissible Power Dissipation Curve

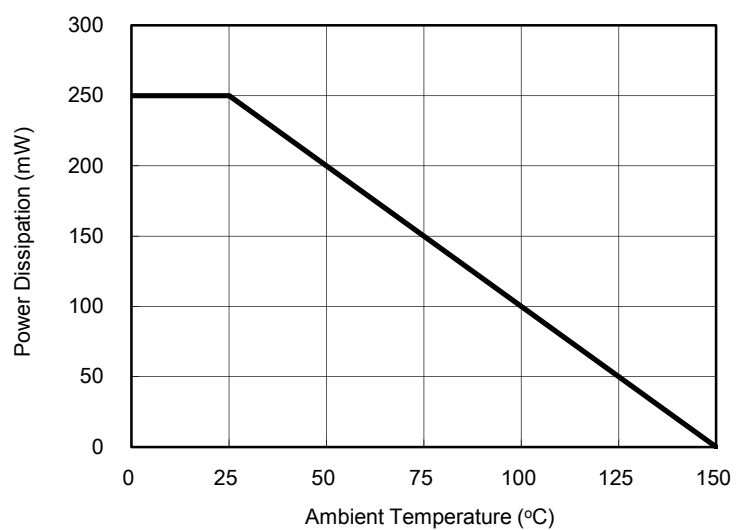


Fig. 2 Typical Forward Characteristics

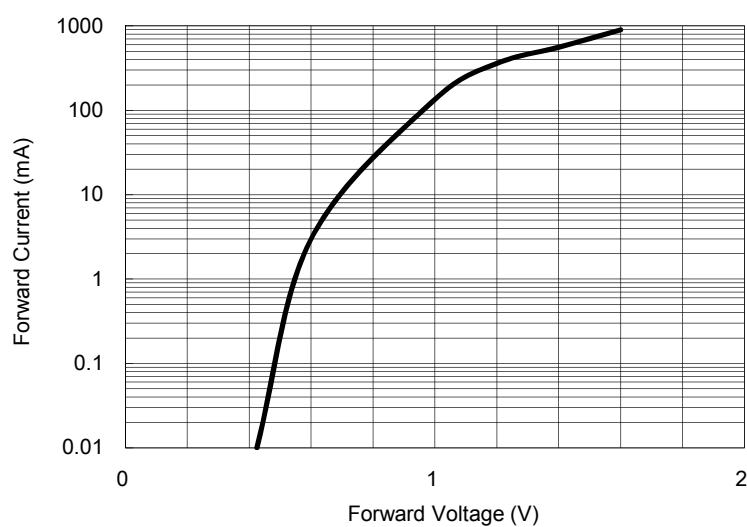
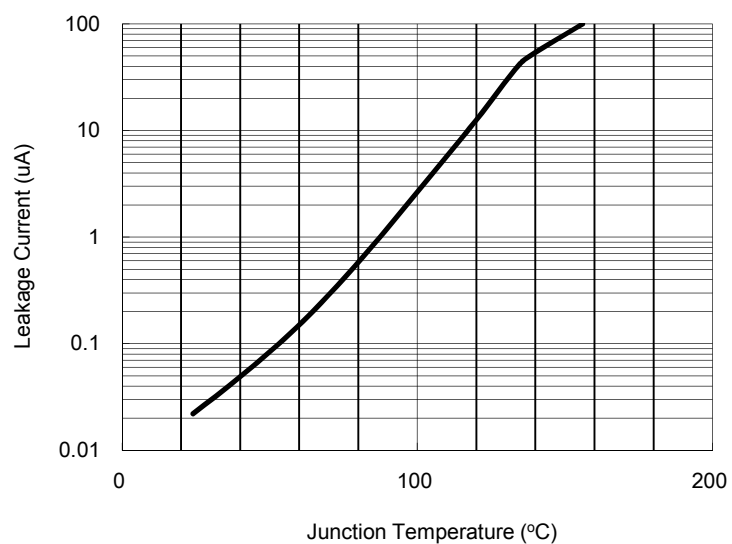
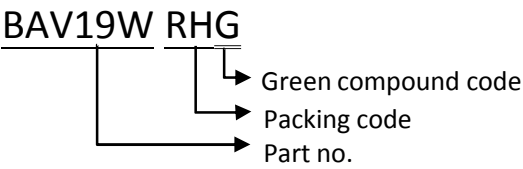


Fig. 3 Leakage Current VS. Junction Temperature

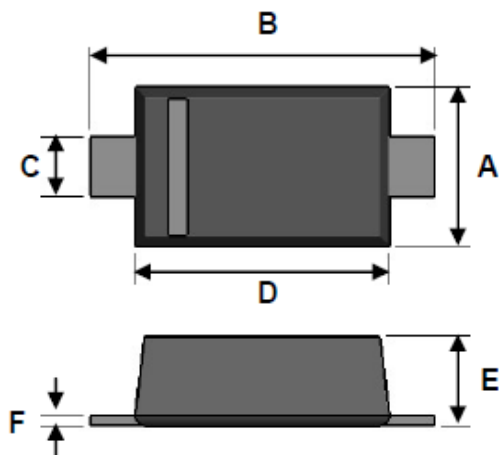


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ORDER INFORMATION (EXAMPLE)

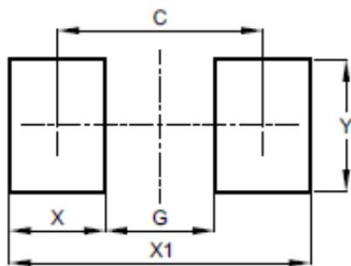


PACKAGE OUTLINE DIMENSIONS
SOD-123F



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.50	1.70	0.059	0.067
B	3.30	3.90	0.130	0.154
C	0.50	0.70	0.020	0.028
D	2.50	2.70	0.098	0.106
E	0.80	1.15	0.031	0.045
F	0.05	0.20	0.002	0.008

SUGGEST PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
C	2.86	0.113
G	1.52	0.060
X	1.34	0.053
X1	4.20	0.165
Y	1.80	0.071

MARKING CODE

Part no.	Marking
BAV19W	H1
BAV20W	H2
BAV21W	H3

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