

Voltage : 75V

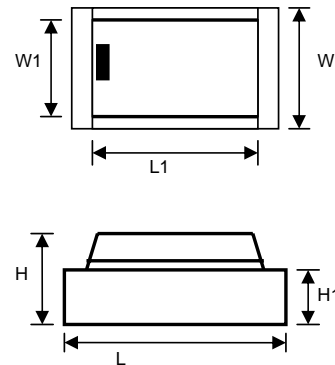
Current: 0.15 Ampere



Part No: **BAVM70 (SOD-123)**

APPLICATION Ultra high speed switching
FEATURE Small surface mounting type (SOD-123) High speed. (TRR=1.5nSec Type) Suitable for high packing density. Maximum total power dissipation is 300mW. Peak forward current is 450mA. Withstand 275°C soldering temperature. ESD rating of class 3(>10KV)per human body model.
CONSTRUCTION Silicon epitaxial planar
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

DIMENSION (mm)
BAVM70 (SOD-123)
W: 1.60mm
W1 1.25mm
L1 2.85mm
H 0.93mm
H1 0.55mm
L 3.60mm



CIRCUIT



MAXIMUM RATING (At Ta = 25°C unless otherwise noted)

RATING	SYMBOL	BAVM70	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	75V	Volts
Maximum RMS Voltage	VRMS	53	Volts
Maximum DC Blocking Voltage	VDC	70	Volts
Maximum Average Forward Rectified Current	Io	0.15	Amps
Peak Forward Surge Current @1,0uSec	IFSM	2.0	Amps
Typical Junction Capacitance between terminal (Note 1)	CJ	1.5	pF
Maximum Reverse Recovery (Note 2)	TRR	4.0	nSec
Maximum Operating Temperature Range	TJ	+175	°C
Maximum operating and storage temperature range.	TJ, TSTG	-65+150	

Package:	
Part No	BAVM70 (SOD-123)
Reel:	4K Pcs
G.W.	0.16 Kg / Reel
Box:	40K Pcs
Carton:	240K PCS
C/Size:	41x39x21cm
G.W.:	10Kg / Carton
Brand:	SINLOON

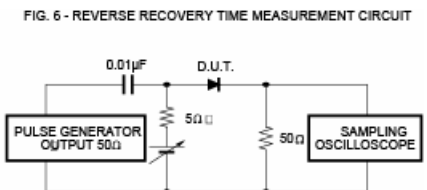
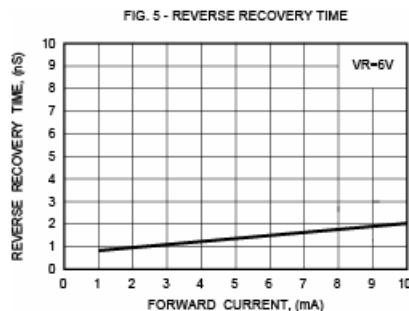
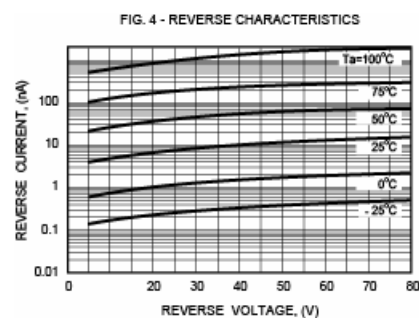
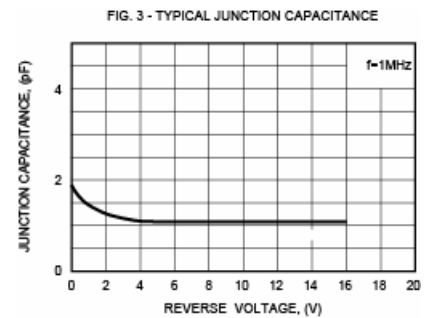
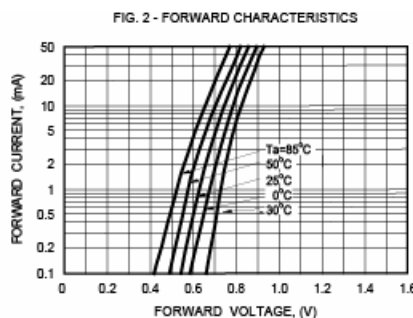
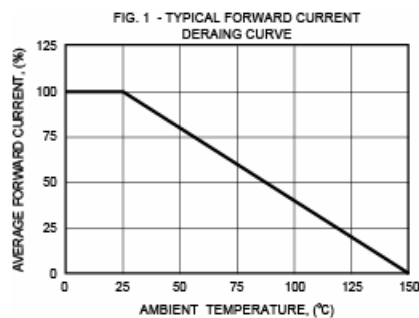


ELECTRICAL CHARACTERISTICS (At Ta = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	BAVM70	UNITS
Maximum Instantaneous Forward Voltage at If= 150mA	Vf	1.25	Volts
Maximum Average Reverse Current VR=75V	Ir	2.5	uAmps

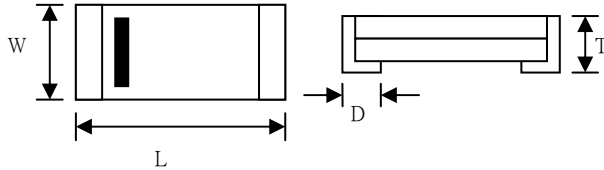
- NOTES 1 Measured at 1.0 MHz and allied reverse voltage of 0 voltage
 2 Measured at applied forward current of 10mA and reverse of 10.0 Volts.
 3 ESD sensitive product handling required.

RATING CHARACTERISTICS CURVES



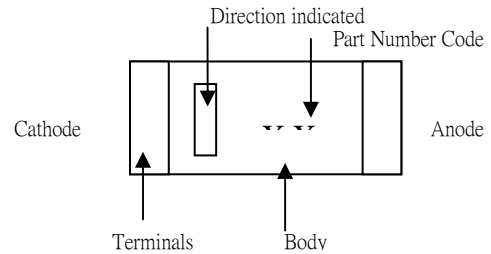
OUTLINE DIMENSION

Item	0603	0805	1206	SOD-123
L	1.55±0.1 (0.062±0.004)	2.00±0.20 (0.080±0.008)	3.2±0.20 (0.127±0.008)	3.50±0.10 (0.140±0.002)
W	0.8±0.10 (0.032±0.004)	1.25±0.20 (0.062±0.004)	1.50±0.20 (0.059±0.008)	1.50±0.10 (0.059±0.004)
T	0.065±0.10 (0.026±0.004)	0.85±0.10 (0.034±0.004)	0.85±0.10 (0.034±0.004)	0.92±0.10 (0.036±0.004)
D	0.35±0.10 (0.014±0.004)	0.45±0.20 (0.018±0.008)	0.55±0.20 (0.022±0.008)	0.35±0.10 (0.0137±0.004)



DEVICE MARKING

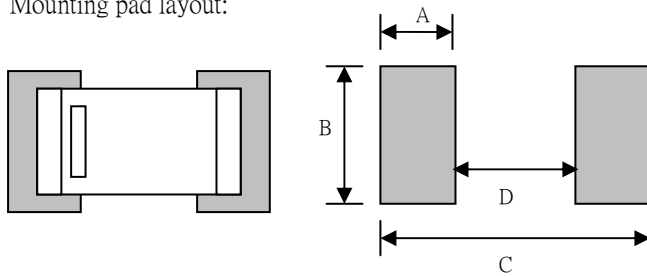
Device has been marked indelibly and legibly as follow



MOUNTING PAD

Unit : mm

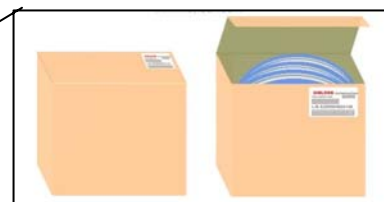
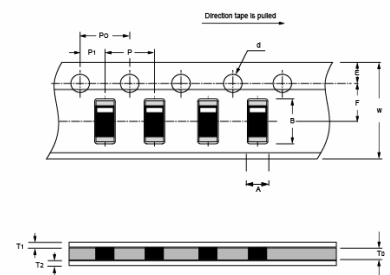
Mounting pad layout:



Layout	A	B	C	D
Size: 0805	1.2	1.2	3.3	0.9
Micro Melf	0.9	1.4	2.8	1.0
SOD-323	1.35	0.65	3.75	1.05
1206	1.2	1.7	4.1	1.7
Mini Melf	1.35	1.7	4.8	2.1
SOD-123	1.2	0.7	4.9	2.5

REEL TAPING SPECIFICATIONS

Item	Symbol	Specifications (mm)			
		Size: 0603	Size: 0805	Size: 1206	SOD-123
Carrier width	A	1.10±0.05	1.65±0.10	2.0±0.10	2.0±0.10
Carrier length	B	1.90±0.05	2.40±0.10	3.6±0.10	3.8±0.10
Sprocket hole	d	1.50±0.15	1.50±0.15	1.50±0.05	1.50±0.05
Sprocket hole position	E	1.75±0.10	1.75±0.10	1.75±0.1	1.75±0.1
Punch hole position	F	3.50±0.05	3.50±0.05	3.5±0.05	3.5±0.05
Punch hole pitch	P	4.00±0.10	4.00±0.10	4.0±0.10	4.0±0.10
Sprocket hole pitch	Po	4.00±0.10	4.00±0.10	4.0±0.10	4.0±0.10
Embossment centre	P1	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05
Base tape width	W	8.0±0.20	8.0±0.20	8.0±0.20	8.0±0.20
Top/Bottom seat tape width	W1	5.25±0.05	5.25±0.05	5.25±0.05	5.25±0.05
Base tape thickness	T0	0.95±0.02	0.95±0.02	0.95±0.02	1.05±0.02
Top seat tape thickness	T1	0.054±0.005	0.054±0.005	0.054±0.005	0.054±0.005
Bottom seat tape thickness	T2	0.042±0.005	0.042±0.005	0.042±0.005	0.042±0.005



Small Signal - Chip Switching Diode

Part No.	Peak Repetitive Reverse Voltage V _{RRM} (V)	Max. Average Rectified Current I _o (mA)	Peak Forward Surge Current I _{FSM} (A)	Forward Voltage Drop V _F (A)	Max Reverse Current I _R (uA)	Power Rating (mW)	Reverse Recovery T _{RR} (nSec)	Capacitance C _{tot} (pF)
1 CD4148WTP (0603)	75	150	0.2	1.0	5.0	300	4.0	4.0
2 CD4148WSP (0805)	75	150	0.2	1.0	5.0	300	4.0	4.0
3 CD4148WP (1206)	75	150	0.2	1.0	5.0	300	4.0	4.0
4 CD4151WP (1206)	50	150	0.2	1.0	5.0	500	4.0	2.0
5 CD4448WP (1206)	75	150	0.2	1.0	5.0	300	4.0	4.0
6 HSD4148 SOD-123	75	150	0.2	1.0	5.0	300	4.0	3.0
7 HSD4151 SOD-123	50	150	0.2	1.0	50 nAmps	500	4.0	2.0
8 HSD4448 SOD-123	75	150	0.2	1.0	5.0	300	4.0	3.0
9 BASM16 SOD-123	100	150	0.2	1.0	1.0 (V _R =75V)	350	4.0	1.5
10 BAVM70 SOD-123	75	150	0.2	1.0	2.5 (V _R =75V)	300	4.0	1.5