

Voltage : 100V

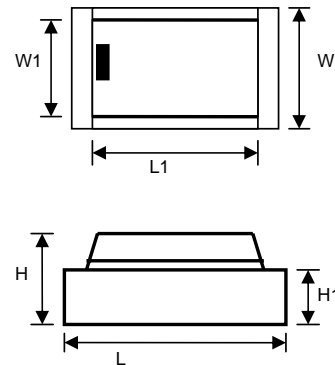
Current: 0.15 Ampere



Part No: BASM16 (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 350mW. 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)
BASM16 (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	BASM16	UNITS
Maximum Non-Repetitive Peak Reverse Voltage	V _{RM}	100	Volts
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	70	Volts
Maximum working Peak Reverse Voltage	V _{RWM}		
Maximum DC Blocking Voltage	V _{DC}		
Maximum RMS Voltage	V _{RMS}	75	Volts
Maximum Average Forward Rectified Current	I _O	0.15	Amps
Peak Forward Surge Current	I _{FSM}	2.0	Amps
@1.0uSec			
Typical Junction Capacitance between terminal (Note 1)	C _J	1.5	pF
Maximum Reverse Recovery (Note 2)	T _{RR}	4.0	nSec
Maximum Operating Temperature Range	T _J	+175	°C
Maximum operating and storage temperature range.	T _J , T _{STG}	-65+150	°C

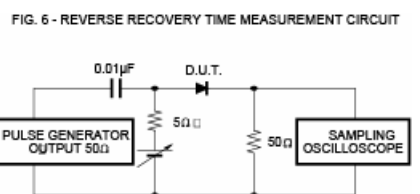
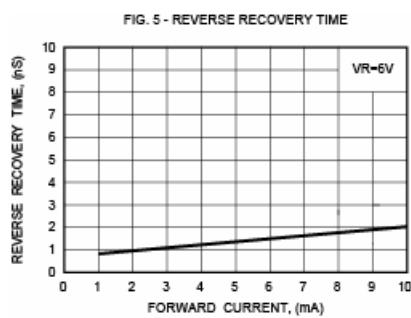
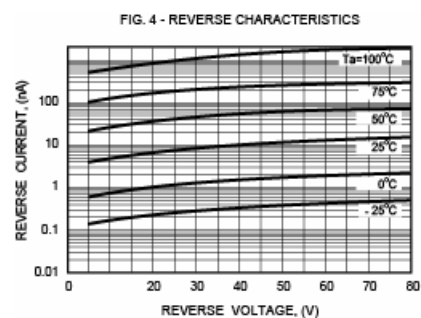
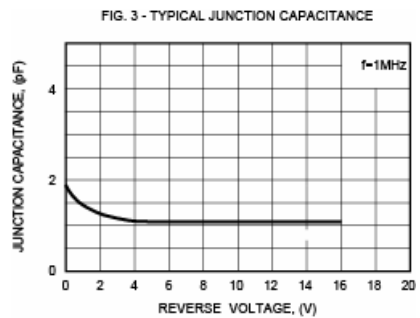
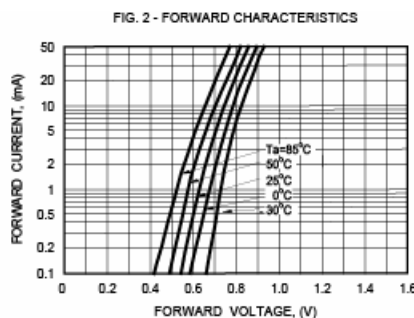
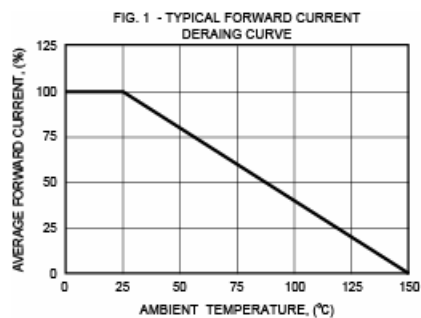
Package:	
Part No	BASM16 (SOD-123)
Reel:	4K Pcs
G.W.	0.16 Kg / Reel
Box:	40K Pcs
Carton:	240K PCS
C/Size:	41x39x21cm
G.W.:	10Kg / Carton
Brand:	SINLOON

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

CHARACTERISTICS	SYMBOL	BASM16	UNITS
Maximum Instantaneous Forward Voltage at I _F = 150mA	V _F	1.25	Volts
Maximum Average Reverse Current	I _R	1.0	uAmps
VR=75V			

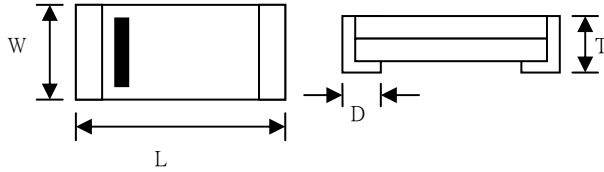
- NOTES 1 Measured at 1.0 MHz and allied reverse voltage of 0 voltage
 2 Measured at applied forward current of 10mA and reverse of 10.0 Volts.
 3 ESD sensitive product handling required.

RATING CHARACTERISTICS CUVES



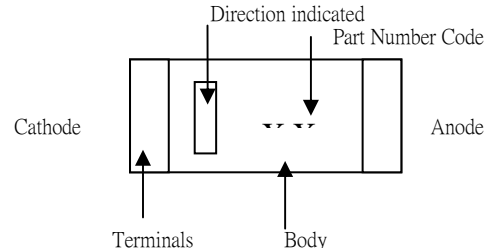
OUTLINE DIMENSION

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

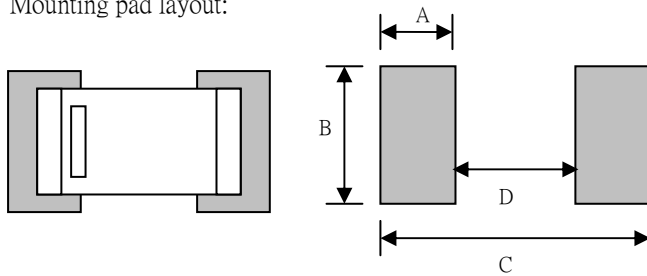
Device has been marked indelibly and legibly as follow



MOUNTING PAD

Unit : mm

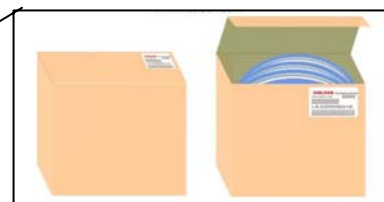
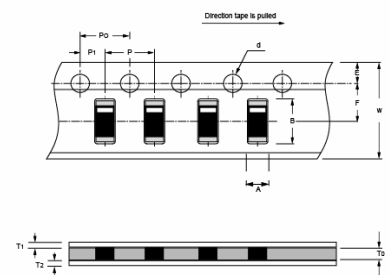
Mounting pad layout:



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 MAVM70 SOD-123	75	150	0.2	1.0	2.5 (V _R =75V)	300	4.0	1.5