



Features

- Low Forward Voltage Drop
- Fast Switching Time
- Surface Mount Package Ideally Suited for Automatic Insertion



SOD-123



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
SMMSD301T1G	SOD-123	S8	3000

Maximum Ratings (Ta=25°C unless otherwise noted)

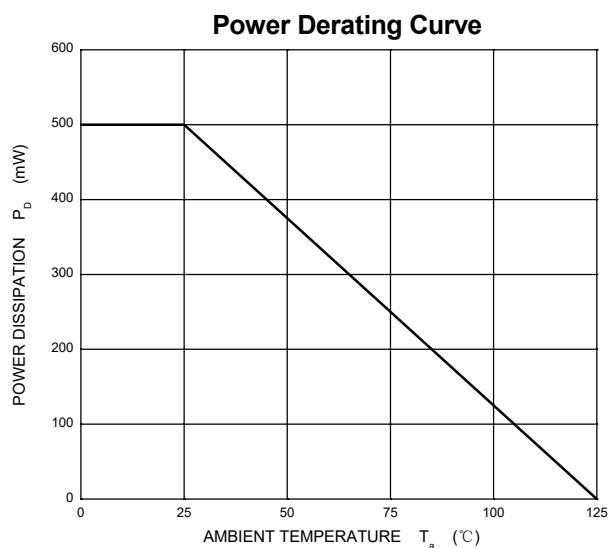
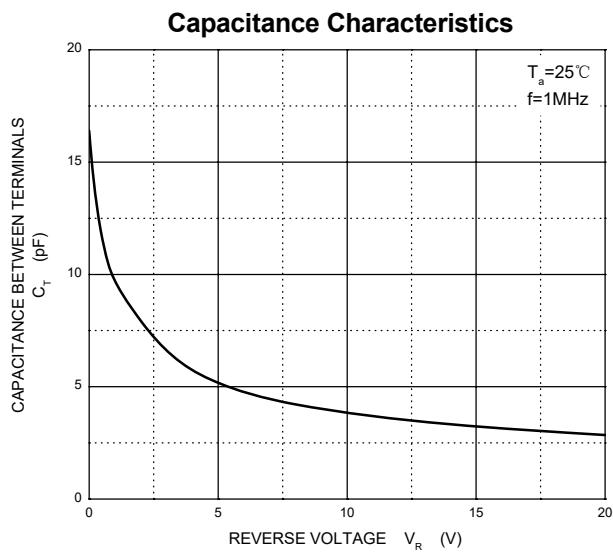
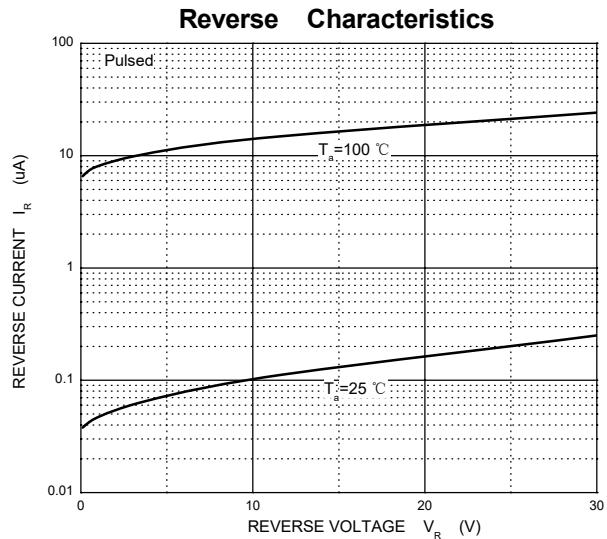
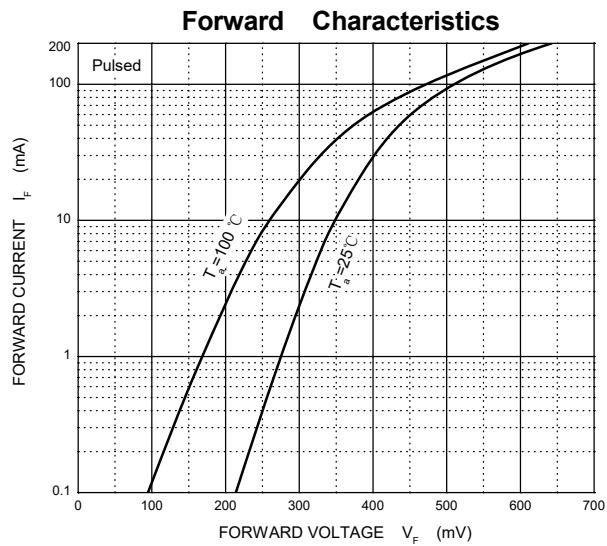
Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage	V _{RRM}		
Working Peak Reverse Voltage	V _{RWM}	30	V
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	21	V
Forward Continuous Current	I _{FM}	200	mA
Repetitive Peak Forward Current @t<1.0s	I _{FRM}	500	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	4.0	A
Power Dissipation	P _D	500	mW
Thermal Resistance Junction to Ambient	R _{θJA}	200	°C/W
Junction temperature	T _J	125	°C
Storage Temperature	T _{STG}	-55~+150	°C

Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	V _(BR)	30			V	I _R =10 μA
Forward voltage	V _F			1.0	V	I _F =200mA
	V _F	0.26		0.33	V	I _F =2mA
	V _F			0.45	V	I _F =15mA
Reverse current	I _R			0.5	μA	V _R =25V
Capacitance between terminals	C _T			10	pF	V _R =1.0V,f=1.0MHz
Reverse recovery time	t _{rr}			5	ns	I _F =I _R =10mA I _{rr} =0.1XI _R ,R _L =100Ω

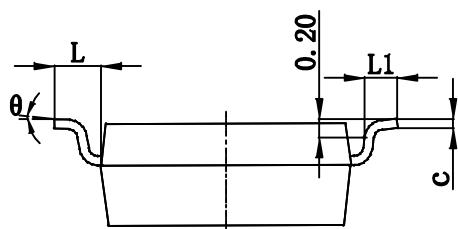
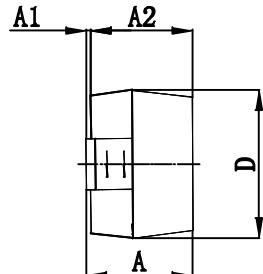
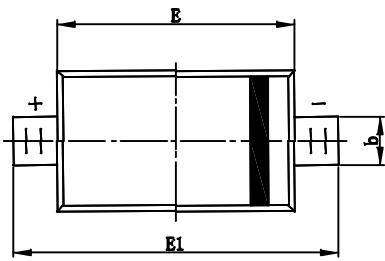


Typical Characteristics



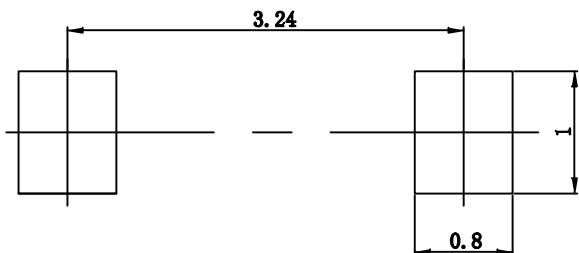


SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

SOD-123 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.



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