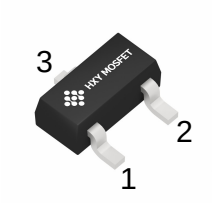
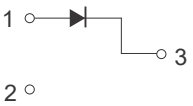
SMMBD701LT1G
Switching Diodes

Features

- Average Rectified Output Current: I_O= 150mA
- Power Dissipation of 225mW



SOT-23



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
SMMBD701LT1G	SOT-23	A6	3000

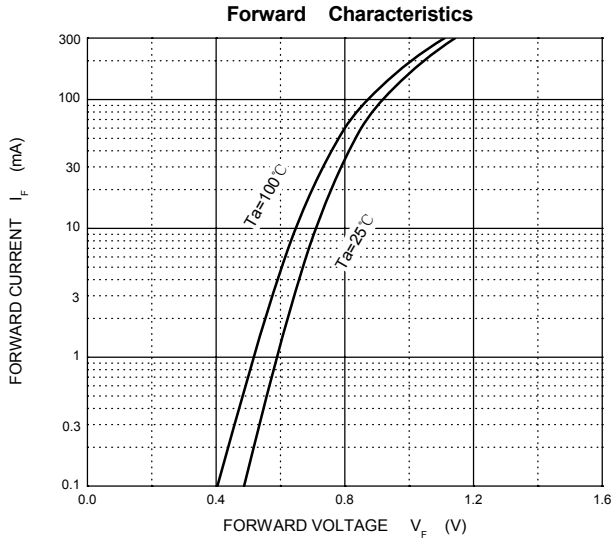
Maximum Ratings (Ta=25°C unless otherwise noted)

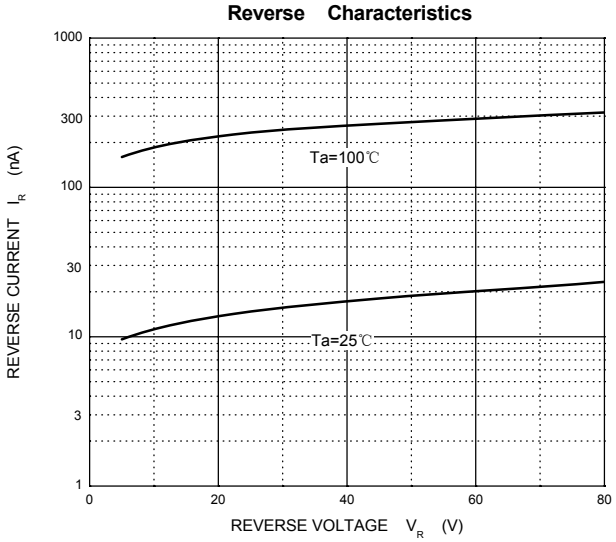
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	Pd	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	-55~+150	°C

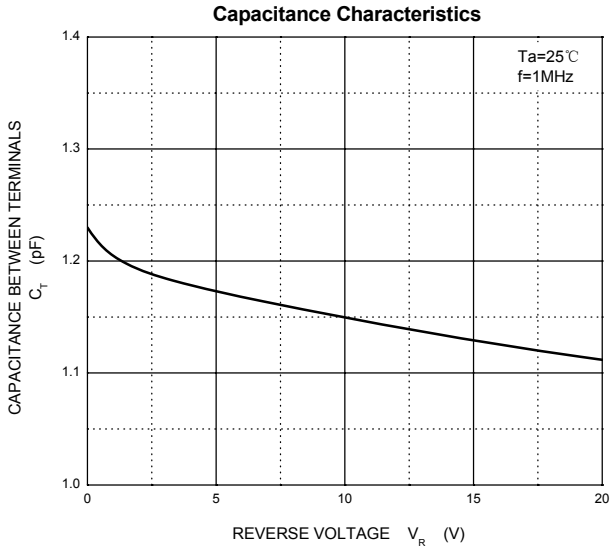
Electrical Characteristics (Ta=25°C unless otherwise specified)

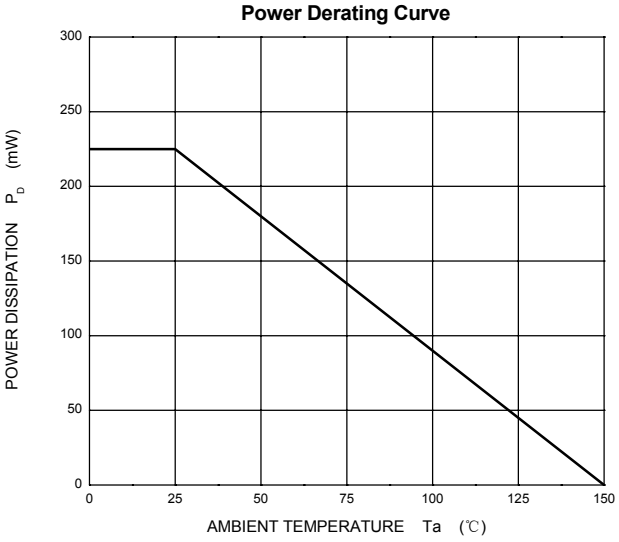
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 100μA	75		V
Reverse voltage leakage current	I_R	V_R=75V		1	μA
Forward voltage	V_F	I_F=1mA I_F=10mA I_F=50mA I_F=150mA		0.715 0.855 1 1.25	V
Diode capacitance	C_D	V_R=0, f=1MHz		2	pF
Reveres recovery time	t_{rr}	I_F=I_R=10mA,I_{rr}=0.1×I_R, R_L=100Ω		6	ns

Typical Characteristics

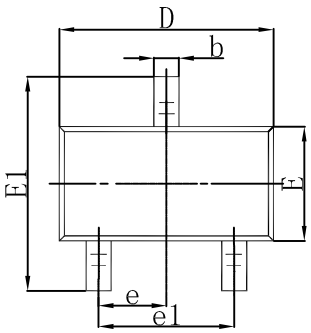


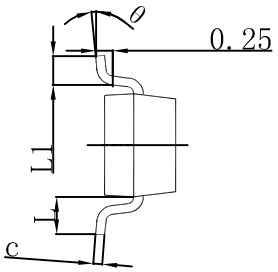


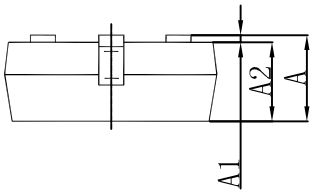




SOT-23 Package Outline Dimensions

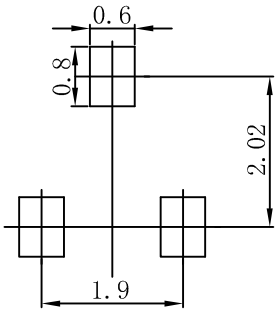






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



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

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