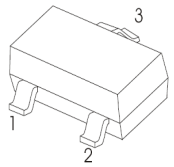
MMBD4148A/SE/CC/CA

SOT-23 Plastic-Encapsulate Diodes

FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

SOT-23



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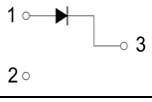	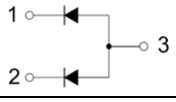	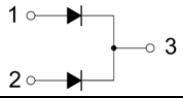	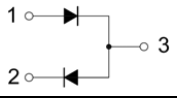
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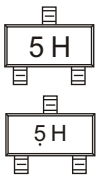
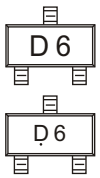
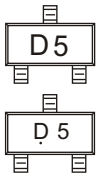
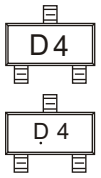
			

Solid dot = Green molding compound device, if none, the normal device

Maximum Ratings @Ta=25℃

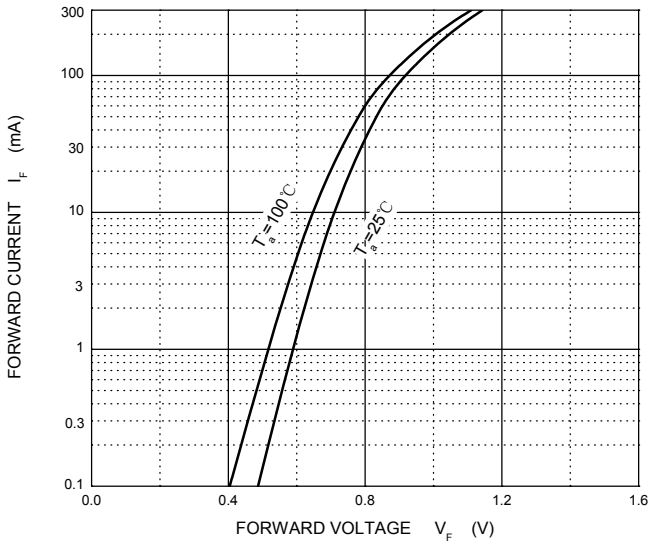
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage **Working Peak Reverse Voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	72	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	℃/W
Junction Temperature	T_j	150	℃
Storage Temperature	T_{STG}	-55~+150	℃

Electrical Ratings @Ta=25℃

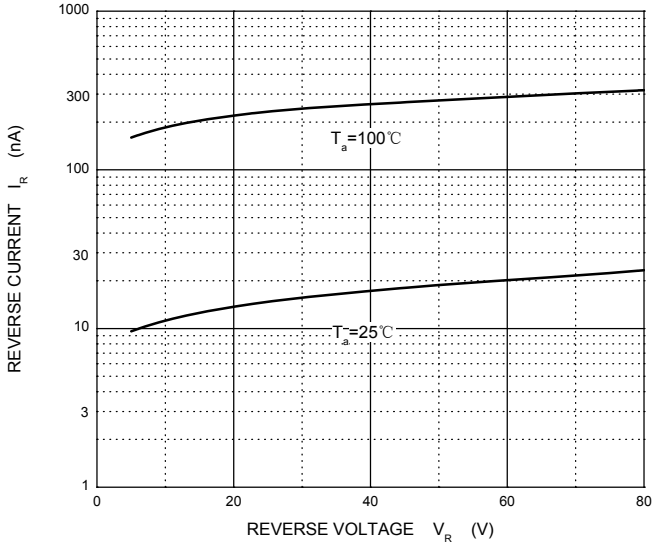
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)1}$	100			V	I_R=100μA
	$V_{(BR)2}$	75			V	I_R=5μA
Forward voltage	V_F			1	V	I_F=10mA
Reverse current	I_{R1}			5	μA	V_R=75V
	I_{R2}			25	nA	V_R=25V
Capacitance between terminals	C_T			4	pF	V_R=0V,f=1MHz
Reverse recovery time	t_{rr}			4	ns	I_F=I_R=10mA, V_R=6V, Irr=0.1XI_R,R_L=100Ω

Typical Characteristics

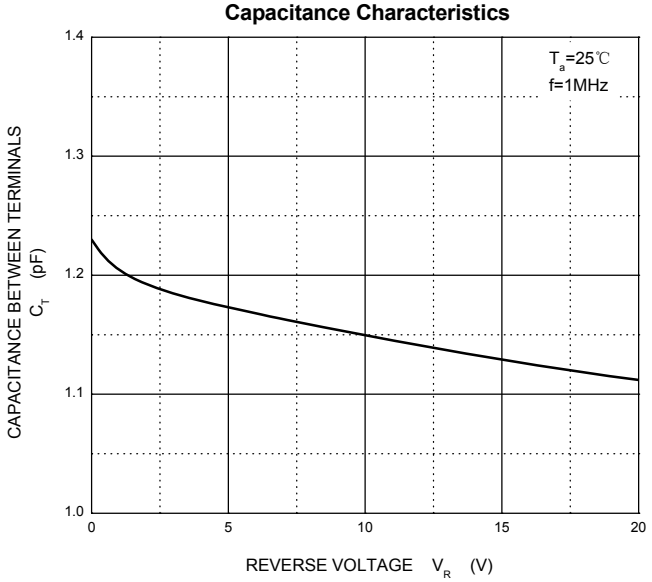
Forward Characteristics



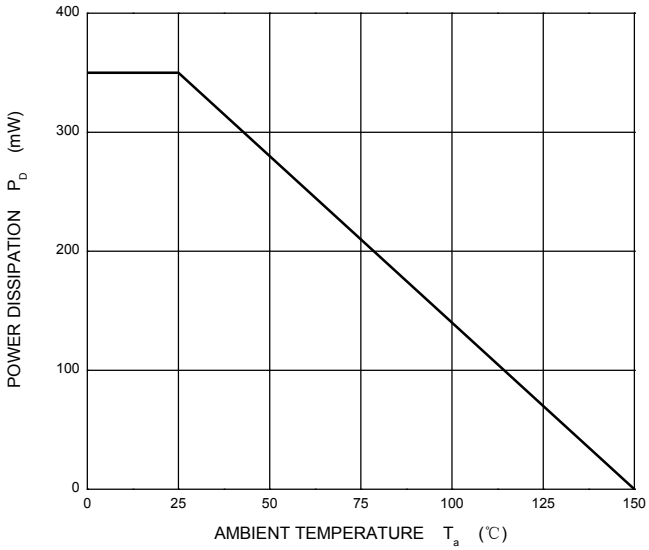
Reverse Characteristics



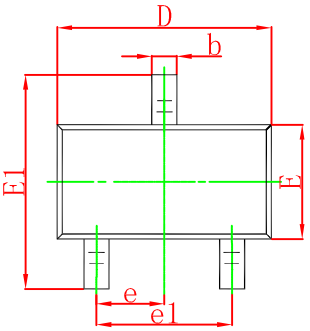
Capacitance Characteristics

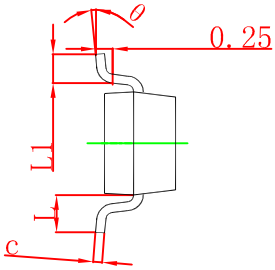


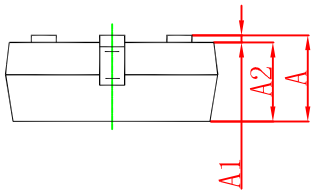
Power Derating Curve



SOT-23 Package Outline Dimensions

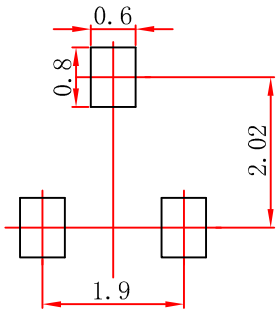






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 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.