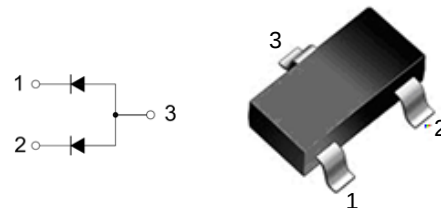


SOT-23 Plastic-Encapsulate Diodes

• Features

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



SOT - 23

• MAXIMUM RATINGS (T_C=25°C)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Working Peak Reverse Voltage	V _{RWM}	100	V
DC Blocking Voltage	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 _{θJA}	357	°C/W
Operation Junction and Storage Temperature Range	T _J , T _{STG}	-55~+150	°C

• ELECTRICAL CHARACTERISTICS (T_a=25°C)

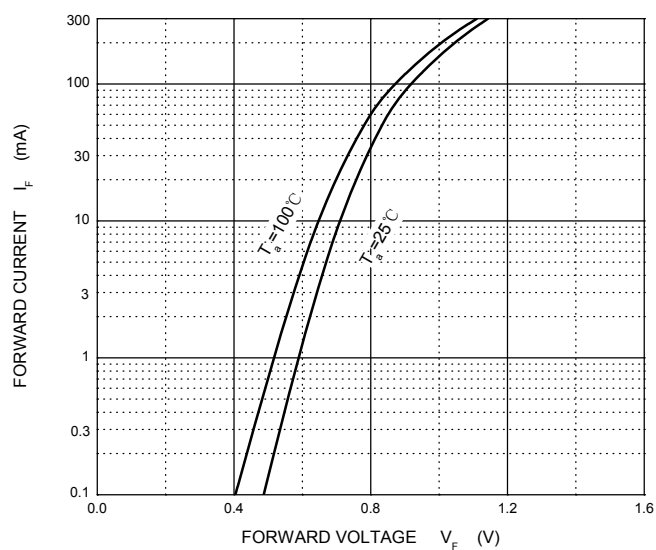
Parameter	Symbol	Conditions	Min	TYP	Max	Unit
Reverse breakdown voltage	V _{(BR) 1}	I _R =100μA	100			V
	V _{(BR) 2}	I _R =5μA	75			V
Forward voltage	V _F	I _F =10mA			1	V
Reverse current	I _{R1}	V _R =75V			5	μA
	I _{R2}	V _R =25V			25	nA
Capacitance between terminals	C _T	V _R =0V, f=1MHz			4	pF
Reverse recovery time	t _{rr}	I _F =I _R =10mA, V _R =6V, I _{rr} =0.1X I _R , R _L =100Ω			4	ns

• Ordering Information:

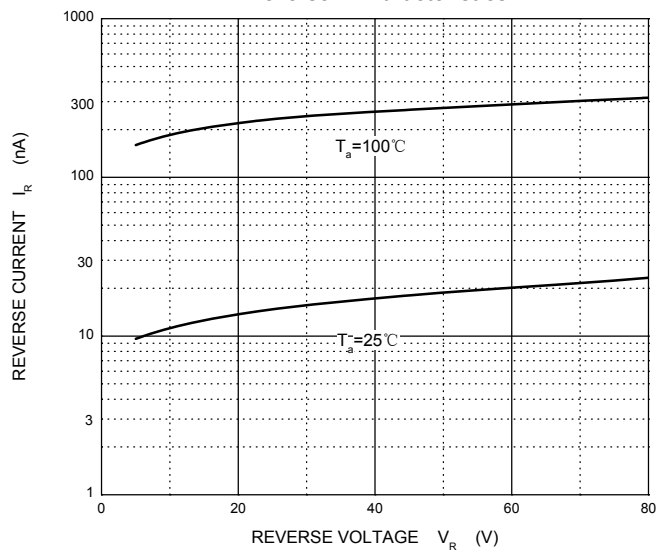
Part NO.	MMBD4148CA
Marking	D6
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

• Typical Characteristics

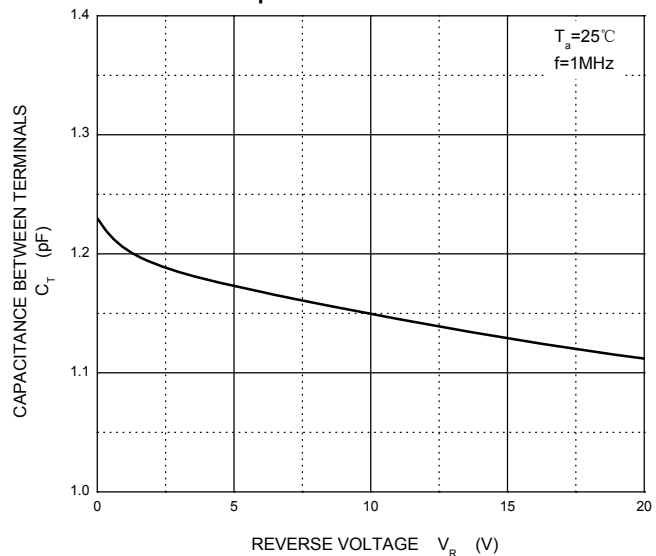
Forward Characteristics



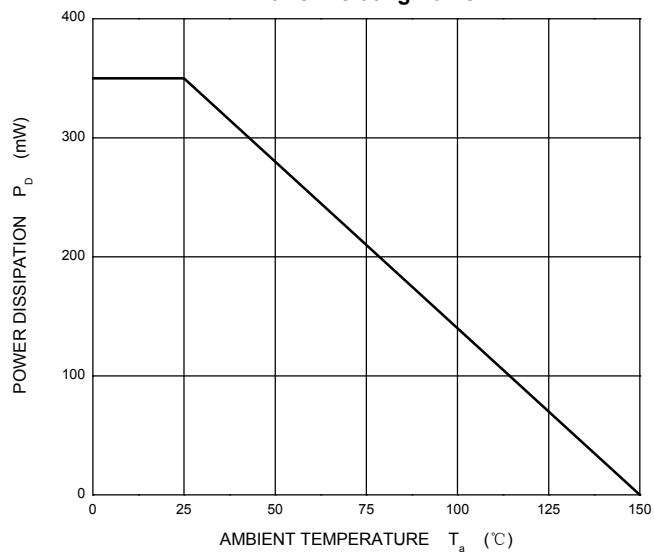
Reverse Characteristics



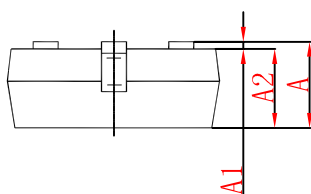
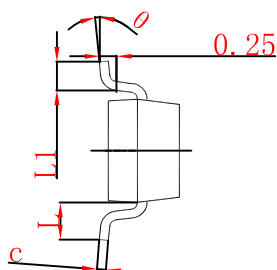
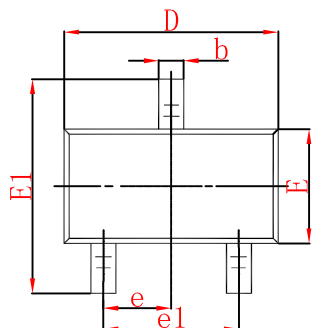
Capacitance Characteristics



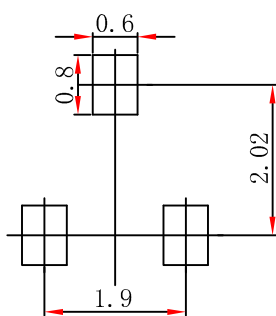
Power Derating Curve



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°



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.