

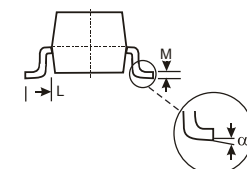
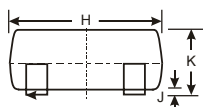
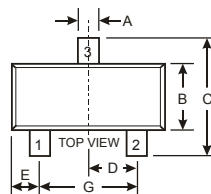
Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

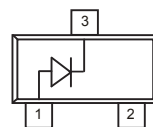
DEVICE	MARKING	TYPE
MMBD4148	5D	Single
MMBD4148SE	A7	Dual
MMBD4148CC	A4	Dual
MMBD4148CA	A1	Dual

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

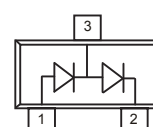
Parameter	Symbol	Value	Unit
Repetitive Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
DC Forward Current	I_{FM}	600	mA
Recurrent Peak Forward Current	I_{FRM}	700	mA
Non-repetitive Peak Forward Surge Current at $t = 1\text{ s}$ at $t = 1\text{ }\mu\text{s}$	I_{FSM}	1 2	A
Total Device Dissipation	P_{tot}	350	mW
Operating Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$



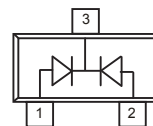
SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.20	1.40
C	2.30	2.50
D	0.89	1.03
E	0.45	0.60
G	1.78	2.05
H	2.80	3.00
J	0.013	0.10
K	0.903	1.10
L	0.45	0.61
M	0.085	0.180
α	0°	8°
All Dimensions in mm		



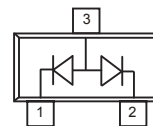
MMBD4148



MMBD4148SE



MMBD4148CC



MMBD4148CA

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	V_F	-	1	V
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$ at $I_R = 5\text{ }\mu\text{A}$	$V_{(BR)R}$	100 75	- -	V
Reverse Current at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 20\text{ V}$, $T_a = 150\text{ }^\circ\text{C}$	I_R	- - -	25 5 50	nA μA μA
Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $I_{RR} = 1\text{ mA}$, $R_L = 100\text{ }\Omega$	t_{rr}	-	4	ns
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	4	pF

TYPICAL TRANSIENT CHARACTERISTICS

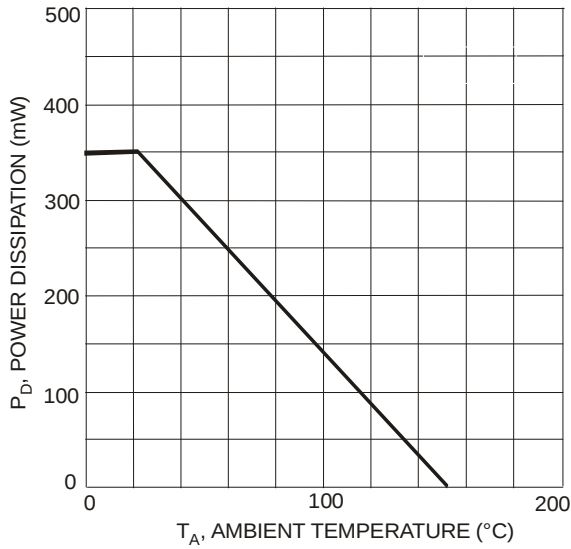


Fig. 1 Power Derating Curve

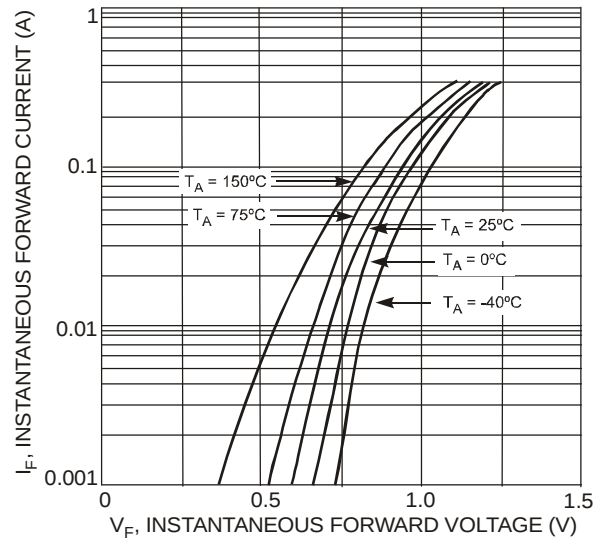


Fig. 2 Typical Forward Characteristics

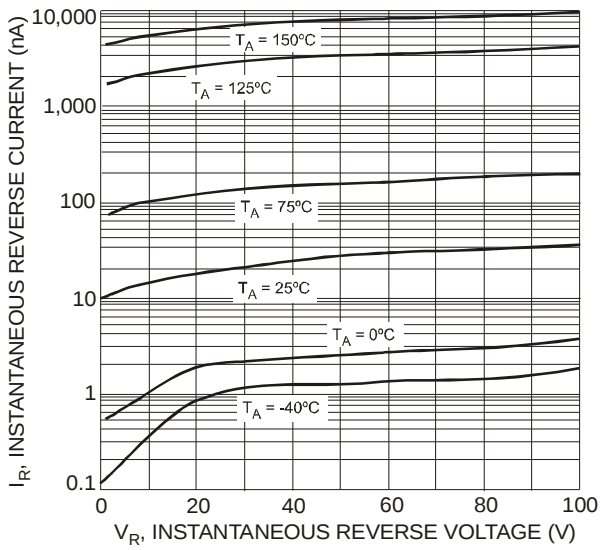


Fig. 3 Typical Reverse Characteristics

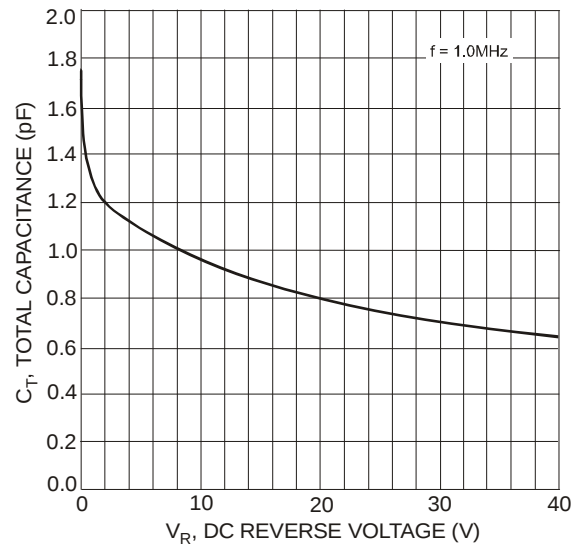


Fig. 4 Total Capacitance vs. Reverse Voltage

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