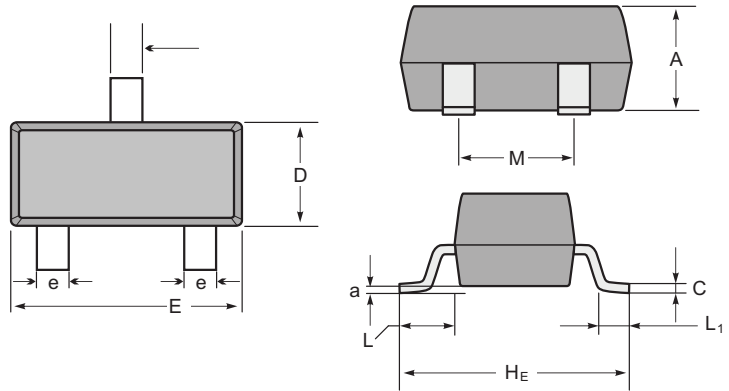
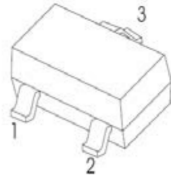


### FEATURES

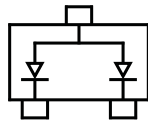
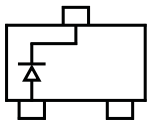
- Fast switching speed.
- For general purpose switching applications.
- High conductance.



### Marking

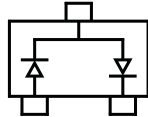
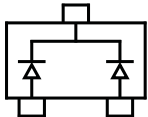
MMBD4148:KA2

MMBD4148CA:D6



MMBD4148CC:D5

MMBD4148SE:D4



SOT-23 mechanical data

UNIT		A	C	D	E	H <sub>E</sub>	e	M	L	L <sub>1</sub>	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

### Maximum Ratings @Ta=25°C

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		
Working Peak Reverse Voltage	V <sub>RWM</sub>	100	V
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	75	V
Forward Continuous Current	I <sub>FM</sub>	300	mA
Average Rectified Output Current	I <sub>o</sub>	200	mA
Peak Forward Surge Current @t=1.0µs	I <sub>FSM</sub>	2.0	A
@ t=1.0s		1.0	
Power Dissipation	P <sub>D</sub>	350	mW
Thermal Resistance Junction to Ambient	R <sub>thJA</sub>	357	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C

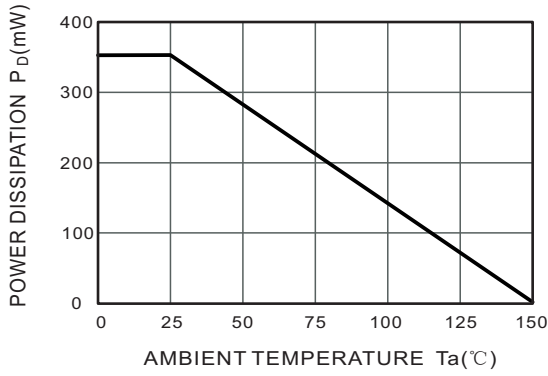
# MMBD4148

## Electrical Characteristics@Ta=25°C

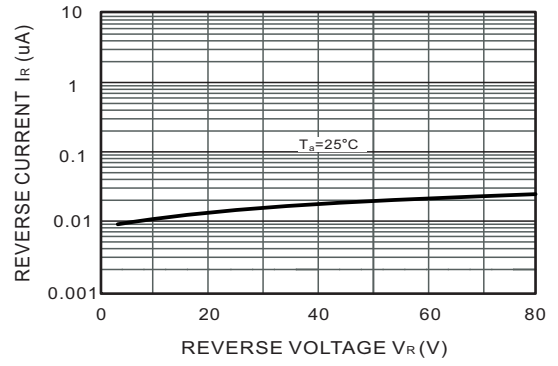
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>(BR)1</sub>	I <sub>R</sub> =100μA	100			V
	V <sub>(BR)2</sub>	I <sub>R</sub> =5 uA	75			V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =10mA			1.0	V
Reverse current	I <sub>R1</sub>	V <sub>R</sub> =75V			5.0	uA
	I <sub>R2</sub>	V <sub>R</sub> =25V			25	nA
Capacitance between terminals	C <sub>T</sub>	V <sub>R</sub> =0V,f=1MHz			4.0	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, V <sub>R</sub> =6V I <sub>rr</sub> =0.1X I <sub>R</sub> , R <sub>L</sub> =100Ω			4.0	ns

## RATING AND CHARACTERISTIC CURVES (MMBD4148)

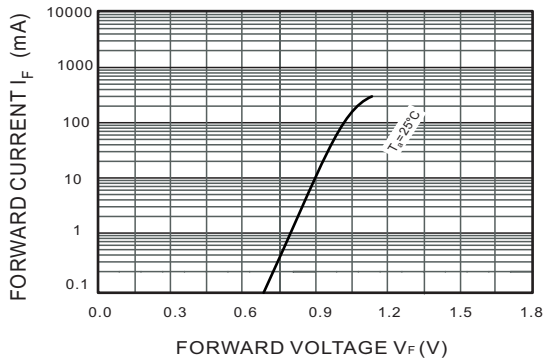
**Fig.1 Power Derating Curve**



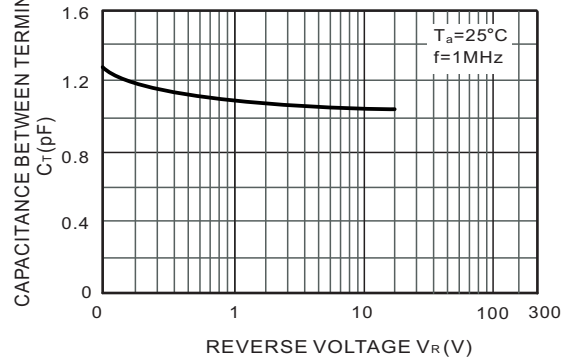
**Fig.2 Reverse Characteristics**



**Fig.3 Forward Characteristics**



**Fig.4 Capacitance Characteristics**



**Fig.5 Semiconductor Intrinsic Property**

