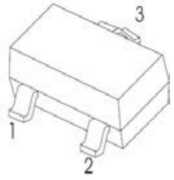
GOODWORK

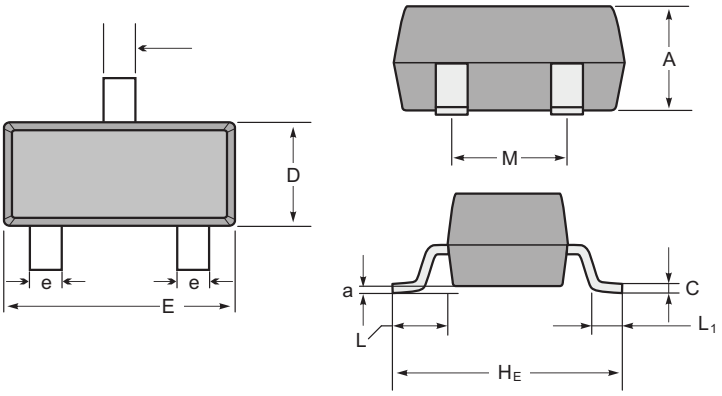
MMBD4148

Switching Diodes

FEATURES

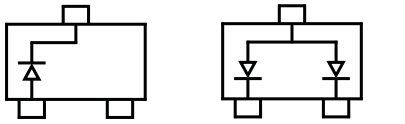
- Fast switching speed.
- For general purpose switching applications.
- High conductance.



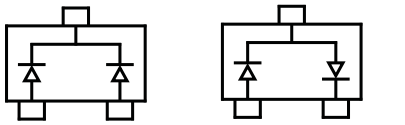


Marking

MMBD4148A:KA2 MMBD4148AC:D6



MMBD4148CC:D5 MMBD4148SE:D4



SOT-23 mechanical data

UNIT		A	C	D	E	H_E	e	M	L	L_1	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℃

Parameter	Symbol	Value	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	$V_{R(RMS)}$	75	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	200	mA
Peak Forward Surge Current @t=1.0μs @ t=1.0s	I_{FSM}	2.0 1.0	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	R_{thJA}	357	℃/W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 ~ +150	℃

MMBD4148

Electrical Characteristics@Ta=25℃

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)1}$	I_R=100μA	100			V
	$V_{(BR)2}$	I_R=5 uA	75			V
Forward voltage	V_F	I_F=10mA			1.0	V
Reverse current	I_{R1}	V_R=75V			5.0	uA
	I_{R2}	V_R=25V			25	nA
Capacitance between terminals	C_T	V_R=0V,f=1MHz			4.0	pF
Reverse recovery time	t_{rr}	I_F=I_R=10mA, V_R=6V I_{rr}=0.1XI_R , R_L=100Ω			4.0	ns

RATING AND CHARACTERISTIC CURVES (MMBD4148)

Fig.1 Power Derating Curve

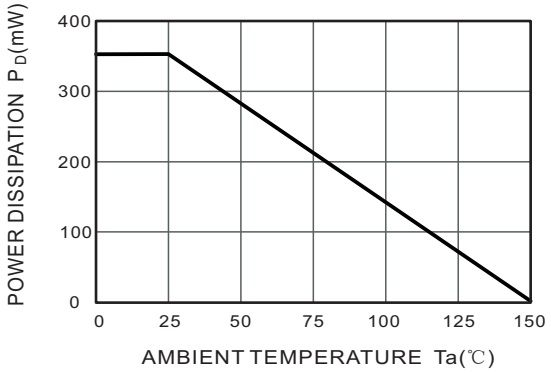


Fig.2 Reverse Characteristics

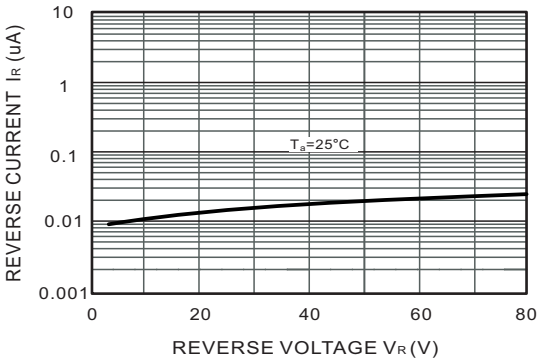


Fig.3 Forward Characteristics

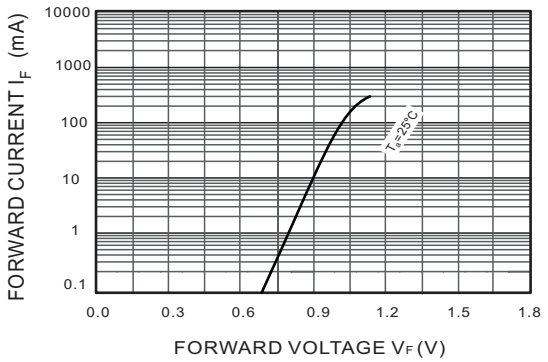


Fig.4 Capacitance Characteristics

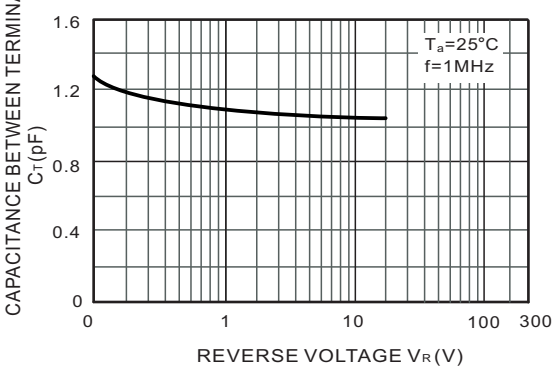


Fig.5 Semiconductor Intrinsic Property