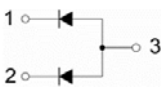
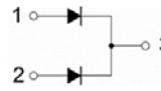
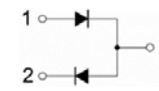


Features

- Small Surface Mounting Type
- For General Purpose Switching Applications
- Fast Switching Speed
- High Conductance

MMBD4148AT	MMBD4148CT	MMBD4148ST
		
Marking:KA3	Marking:KA4	Marking:KA5
		



Halogen-Free

Maximum Ratings($T_a=25^{\circ}\text{C}$ unless otherwise noted)

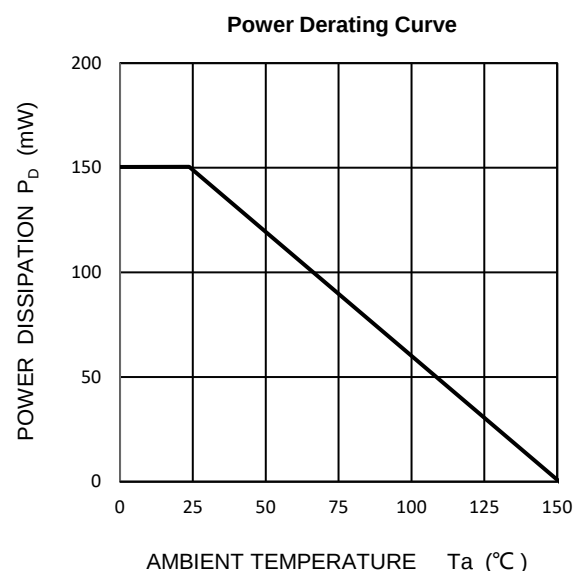
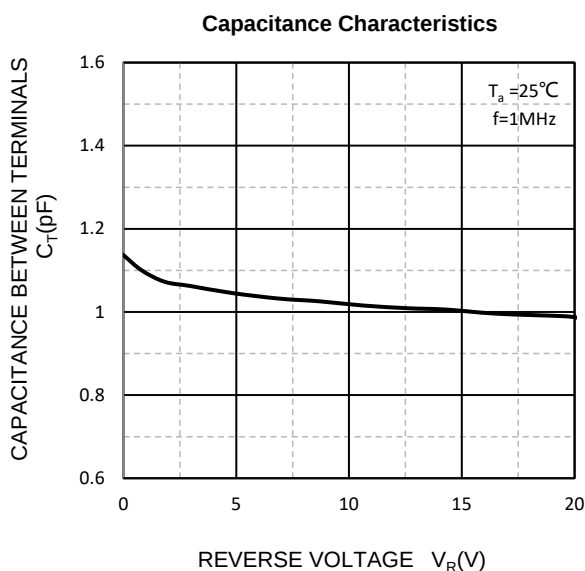
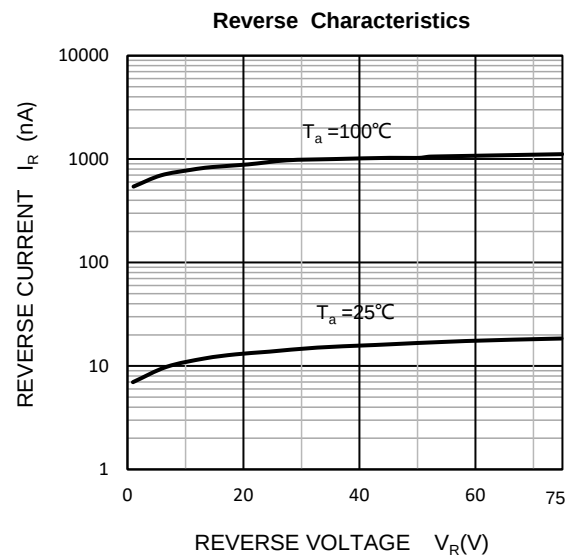
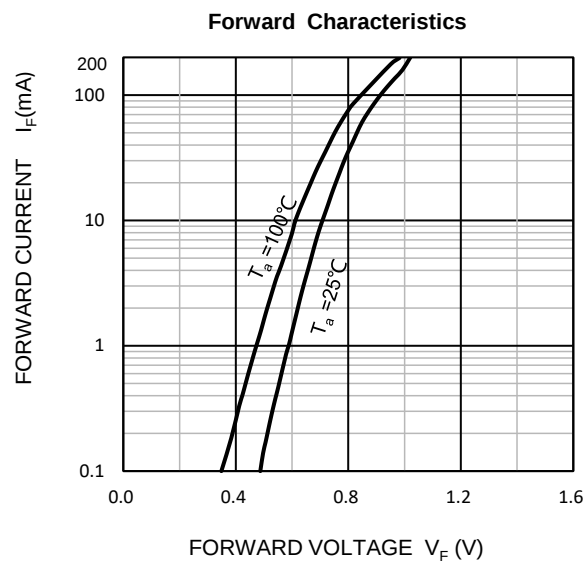
Symbol	Parameter	Limit	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RWM}	Working Peak Reverse Voltage	75	V
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_O	Average Rectified Output Current	150	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	833	$^{\circ}\text{C/W}$
T_J, T_{STG}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

Ordering Information (Example)

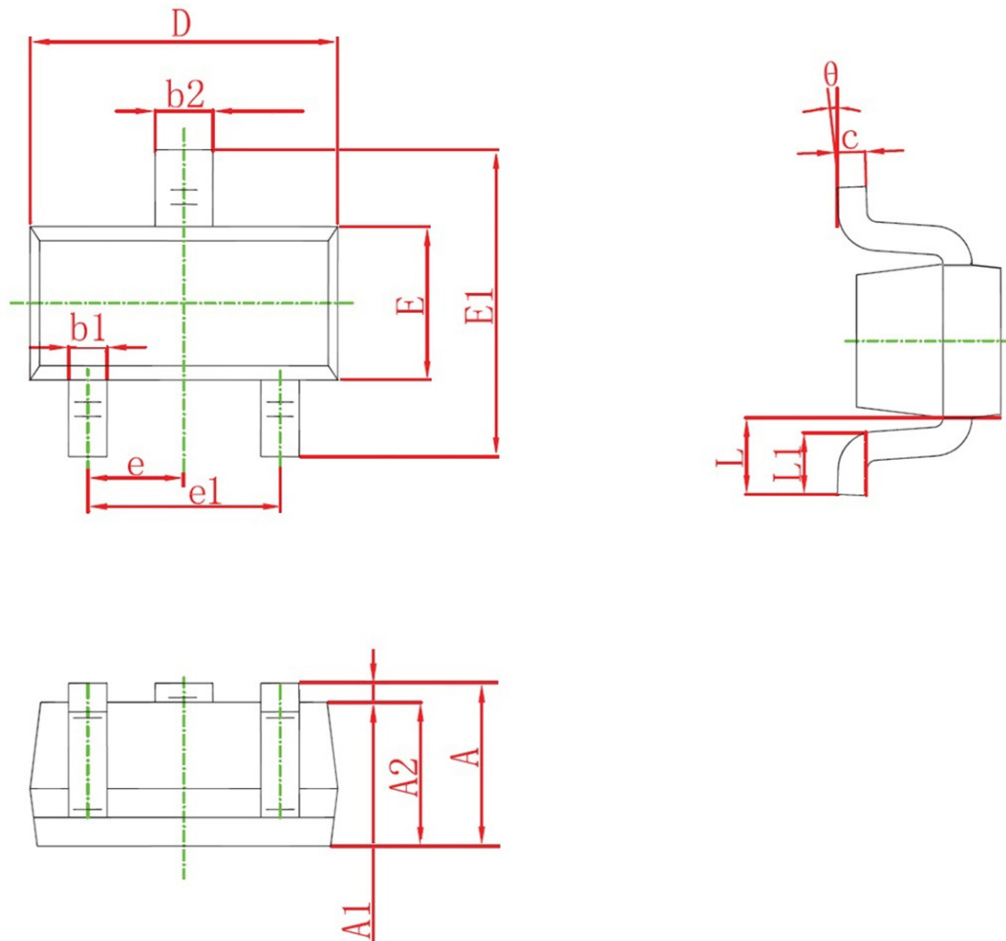
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
MMBD4148AT	SOT-523	KA3	3,000	45,000	180,000	7"reel
MMBD4148CT	SOT-523	KA4	3,000	45,000	180,000	7"reel
MMBD4148ST	SOT-523	KA5	3,000	45,000	180,000	7"reel

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=10\mu\text{A}$	75	--	--	V
V_{F1}	Forward voltage	$I_F=1\text{mA}$	--	--	0.715	V
V_{F2}		$I_F=10\text{mA}$	--	--	0.855	V
V_{F3}		$I_F=50\text{mA}$	--	--	1.000	V
V_{F4}		$I_F=150\text{mA}$	--	--	1.250	V
I_{R1}	Reverse current	$V_R=75\text{V}$	--	--	1	μA
I_{R2}		$V_R=20\text{V}$	--	--	25	nA
C_T	Capacitance between terminals	$V_R=0\text{V}, f=1\text{MHz}$	--	--	2	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10\text{mA}, I_{rr}=0.1X I_R, R_L=100\Omega$	--	--	4	ns

Typical Operating Characteristics


SOT-523 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500TYP		0.020TYP	
e1	0.900	1.100	0.035	0.043
L	0.400REF		0.016REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°