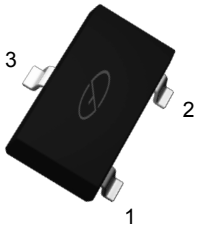
GOOD-ARK
SEMICONDUCTOR

MMBD4448Hxx
Switching Diode

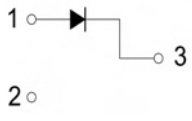
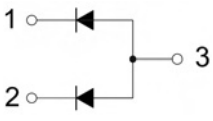
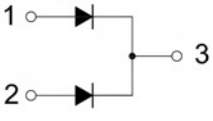
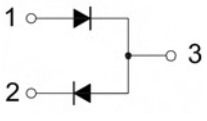
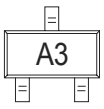
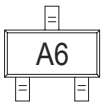
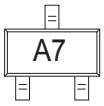
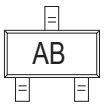
Features

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



SOT-523

Schematic Diagram and Marking Information

MMBD4448HT	MMBD4448HTA	MMBD4448HTC	MMBD4448HTS
			
MARKING:A3	MARKING:A6	MARKING:A7	MARKING: AB
			

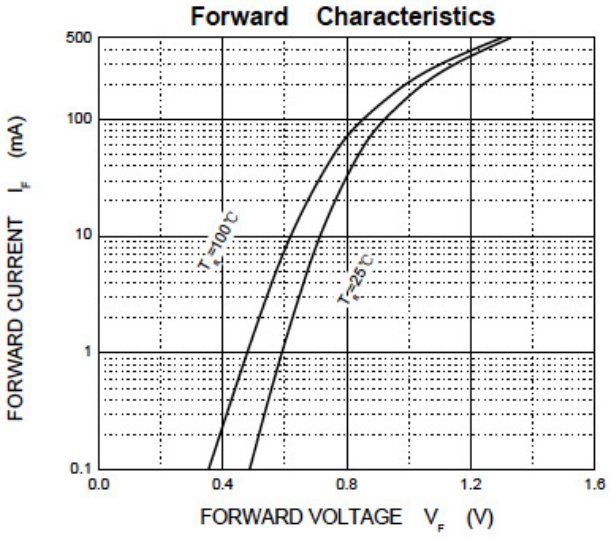
Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

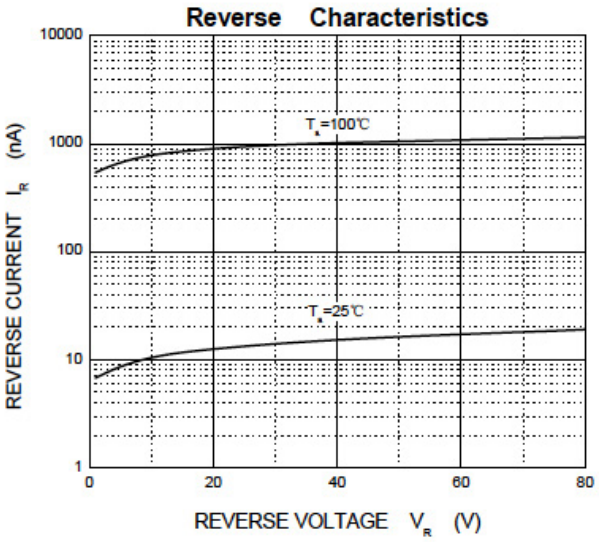
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	80	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	57	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Output Current	I_O	250	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2	A
Power Dissipation	Pd	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	833	℃/W
Storage Temperature	T_{STG}	-55 to +150	℃

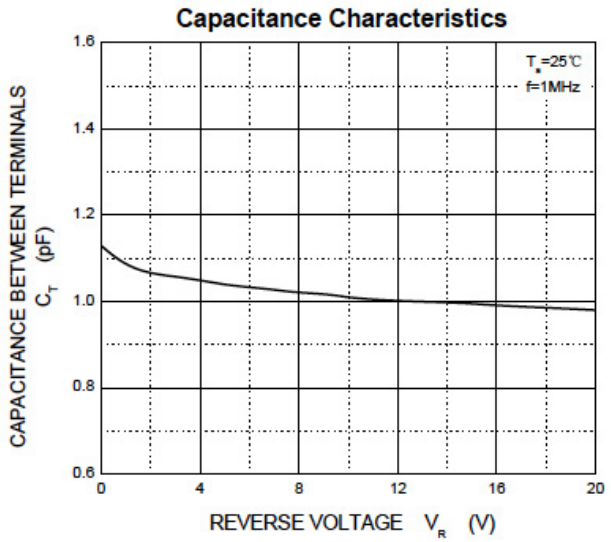
Electrical Characteristics (T_A=25°C unless otherwise specified)

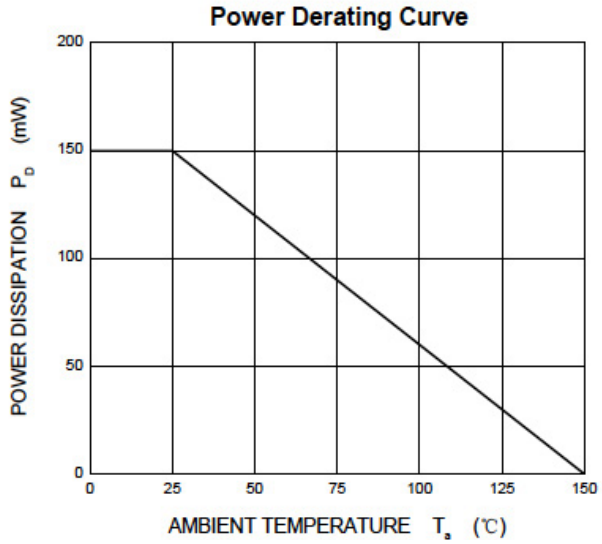
Parameter	Symbol	Conditions	Min	Max	Unit
Reverse Breakdown Voltage	V_R	I_R=2.5 μA	80	-	V
Forward Voltage	V_{F1}	I_F=5mA	0.62	0.72	V
	V_{F2}	I_F=10mA	-	0.855	V
	V_{F3}	I_F=100mA	-	1	V
	V_{F4}	I_F=150mA	-	1.25	V
Reverse Current	I_{R1}	V_R=70V	-	0.1	μA
	I_{R2}	V_R=20V	-	25	nA
Capacitance Between Terminals	C_T	V_R=6V,f=1MHz	-	3.5	pF
Reverse Recovery Time	t_{rr}	I_F=I_R=10mA Irr=0.1XI_R,R_L=100Ω	-	4	ns

Typical Characteristics Curves

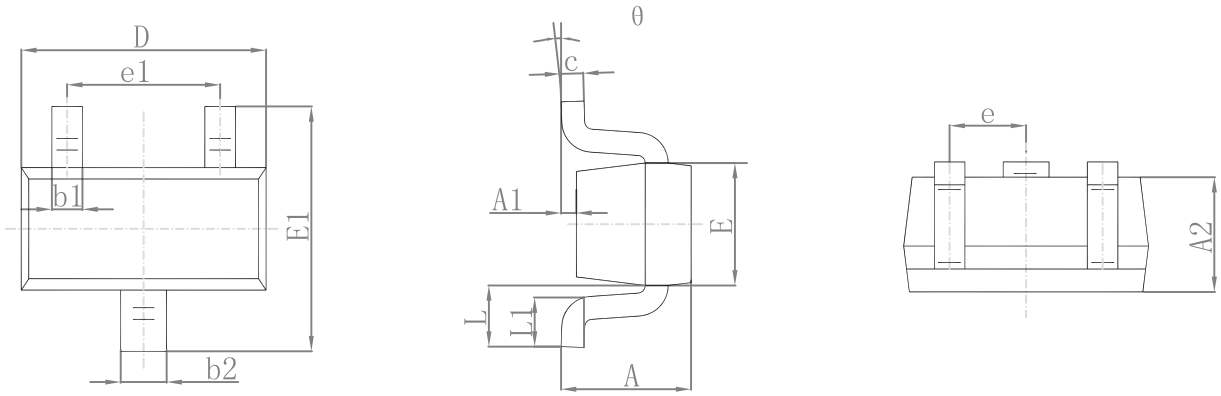






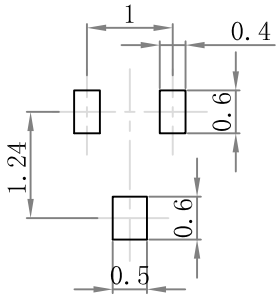


Package Outline Dimensions SOT-523



Symbol	Dimensions In Millimeters		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	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.