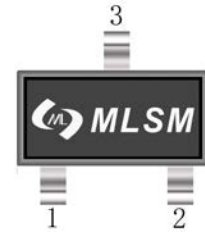
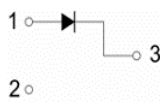
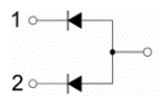
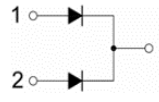
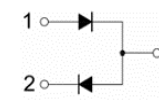
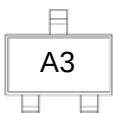
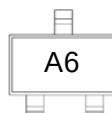
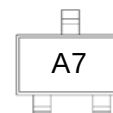
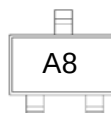


Features

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



SOT-523 top view

MMBD4448HT	MMBD4448HTA	MMBD4448HTC	MMBD4448HTS
			
Marking:A3	Marking:A6	Marking:A7	Marking:A8
			



Halogen-Free

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C)

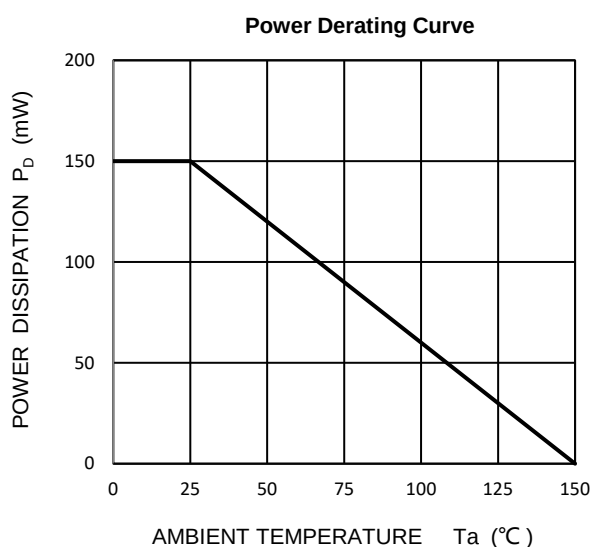
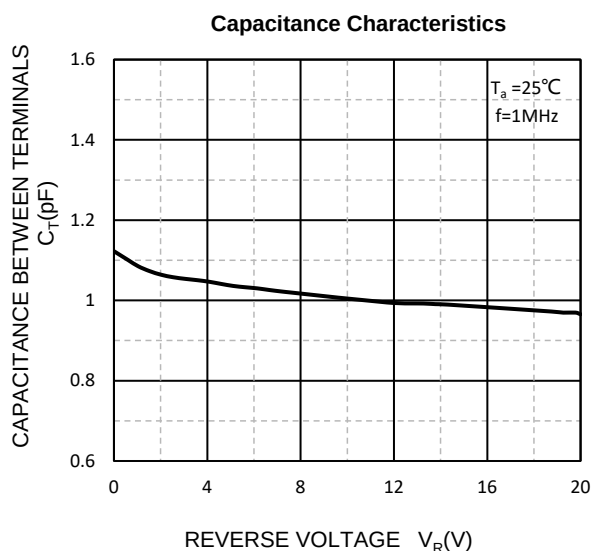
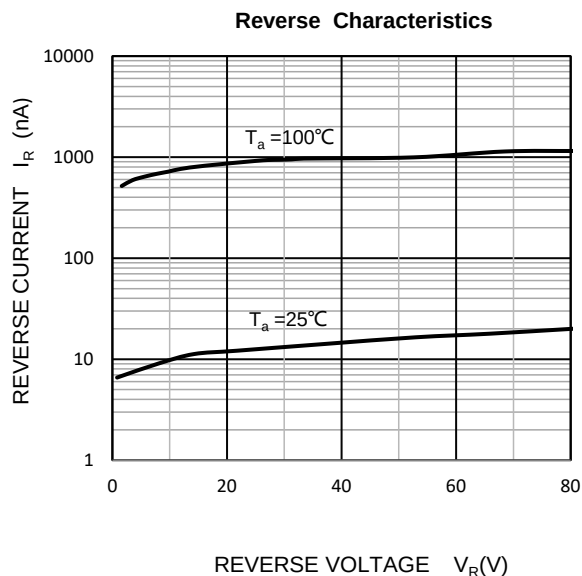
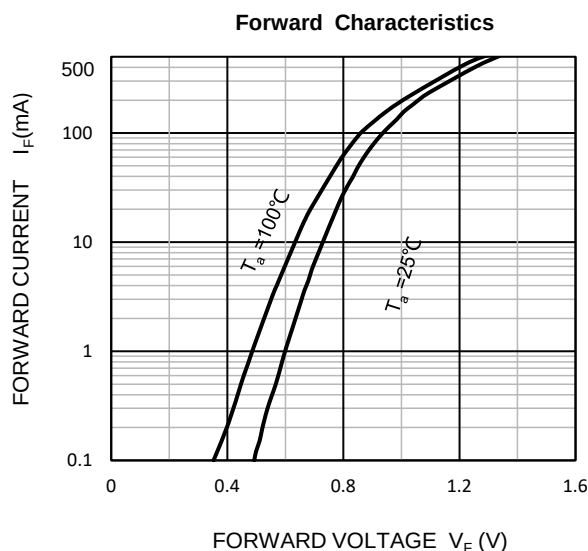
Symbol	Parameter	Limit	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Peak Repetitive Peak Reverse Voltage	80	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	57	V
I_{FM}	Forward Continuous Current	500	mA
I_O	Average Rectified Output Current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

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
MMBD4448HT	SOT-523	A3	3,000	45,000	180,000	7"reel
MMBD4448HTA	SOT-523	A6	3,000	45,000	180,000	7"reel
MMBD4448HTC	SOT-523	A7	3,000	45,000	180,000	7"reel
MMBD4448HTS	SOT-523	AB	3,000	45,000	180,000	7"reel

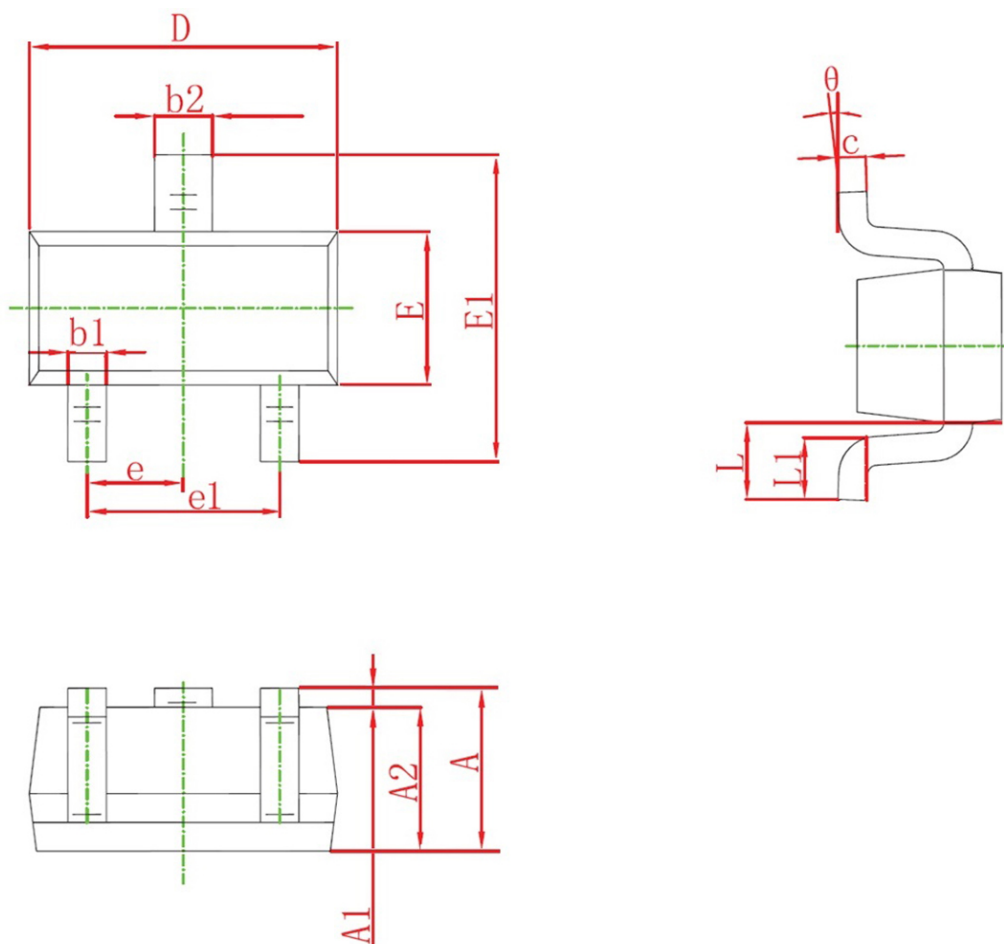
Electrical Ratings @Ta=25°C

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=2.5\mu A$	80	--	--	V
V_{F1}	Forward voltage	$I_F=5mA$	0.620	--	0.720	V
V_{F2}		$I_F=10mA$	--	--	0.855	V
V_{F3}		$I_F=50mA$	--	--	1.000	V
V_{F4}		$I_F=150mA$	--	--	1.250	V
I_{R1}	Reverse current	$V_R=70V$	--	--	0.1	μA
I_{R2}	Reverse current	$V_R=20V$	--	--	25	nA
C_T	Capacitance between terminals	$V_R=6V, f=1MHz$	--	--	3.5	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$	--	--	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°