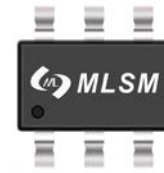
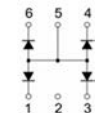
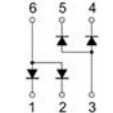
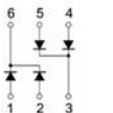
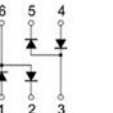
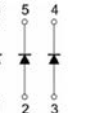
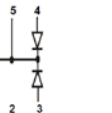
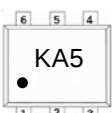


Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance Power Dissipation
- Ultra-Small Surface Mount Package



SOT-363 top view

MMBD4448HAQW	MMBD4448HADW	MMBD4448HCDW	MMBD4448HSDW	MMBD4448HTW	MMBD4448HCQW
					
Marking:KA5	Marking:KA6	Marking:KA7	Marking:KAB	Marking:KAA	Marking:KA4
					



Halogen-Free

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

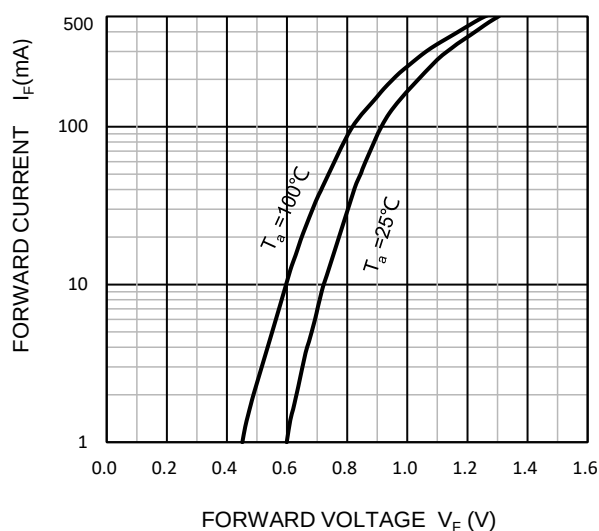
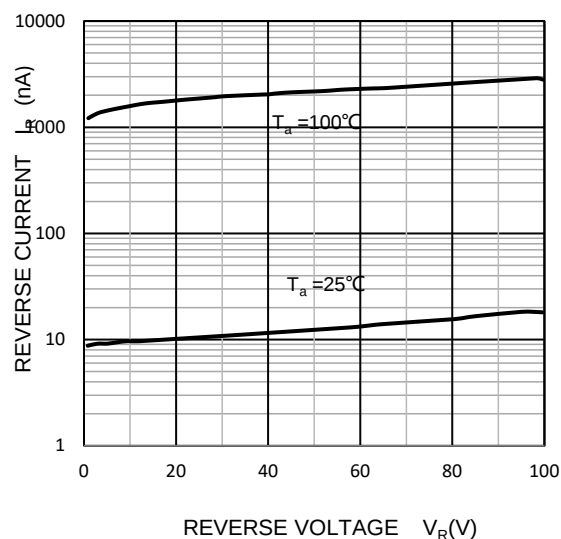
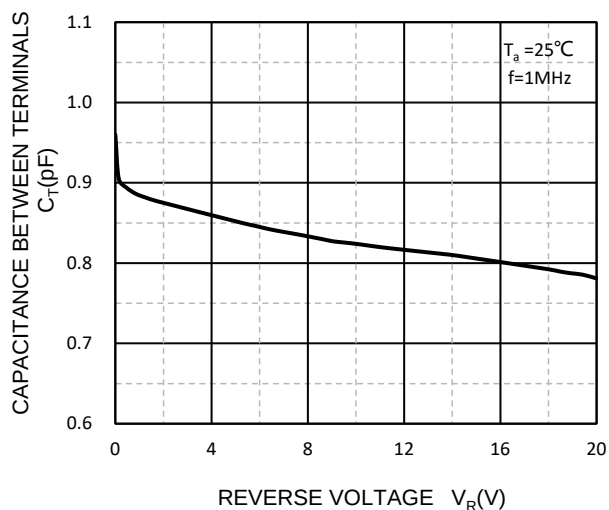
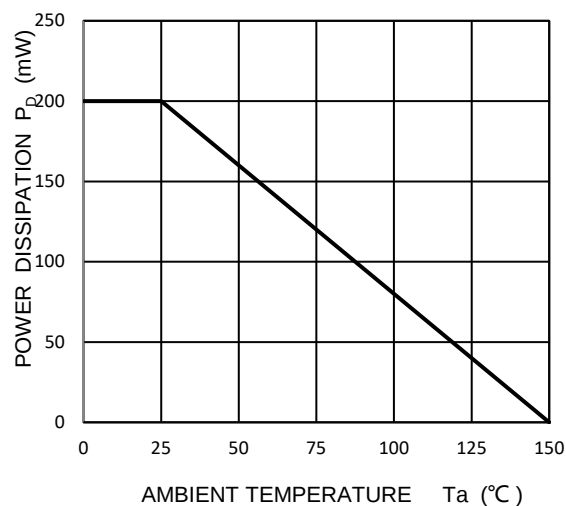
Symbol	Parameter	Limit	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Peak Repetitive Peak Reverse Voltage	80	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	57	V
I_{FM}	Forward Continuous Current	500	mA
I_O	Average Rectified Output Current	250	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2	A
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	625	$^{\circ}\text{C/W}$
T_J, T_{STG}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

Ordering Information (Example)

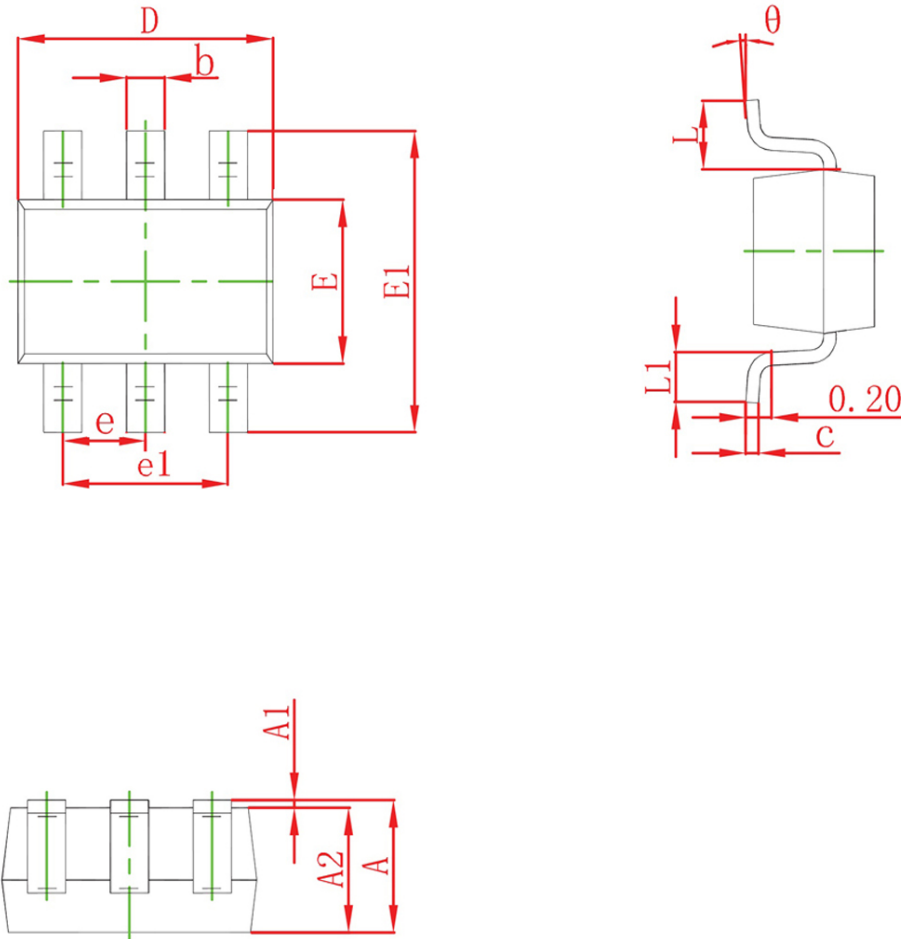
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
MMBD4448HAQW	SOT-363	KA5	3,000	45,000	180,000	7"reel
MMBD4448HADW	SOT-363	KA6	3,000	45,000	180,000	7"reel
MMBD4448HCDW	SOT-363	KA7	3,000	45,000	180,000	7"reel
MMBD4448HSDW	SOT-363	KAB	3,000	45,000	180,000	7"reel
MMBD4448HTW	SOT-363	KAA	3,000	45,000	180,000	7"reel
MMBD4448HCQW	SOT-363	KA4	3,000	45,000	180,000	7"reel

ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=100\mu A$	80	--	--	V
V_{F1}	Forward voltage	$I_F=5mA$	0.62	--	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	$V_R=70V$	--	--	100	nA
I_{R2}	Reverse current	$V_R=20V$	--	--	25	nA
C_T	Capacitance between terminals	$V_R=0V, f=1MHz$	--	--	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
Forward Characteristics

Reverse Characteristics

Capacitance Characteristics

Power Derating Curve


SOT-363 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L	0.525REF		0.021REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°