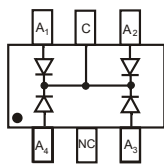


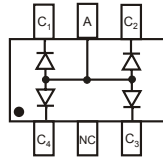
Switching Diodes

MMBD4448HCQW/HAQW/HADW/HCDW/HSDW/HTW
(KMBD4448HCQW/HAQW/HADW/HCDW/HSDW/HTW)
■ Features

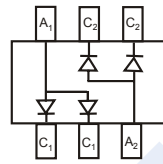
- Fast Switching Speed
- For General Purpose Switching Applications.
- High Conductance, Power Dissipation
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1



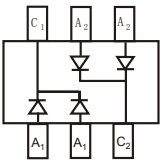
MMBD4448HCQW



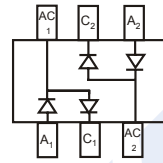
MMBD4448HAQW



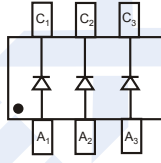
MMBD4448HADW



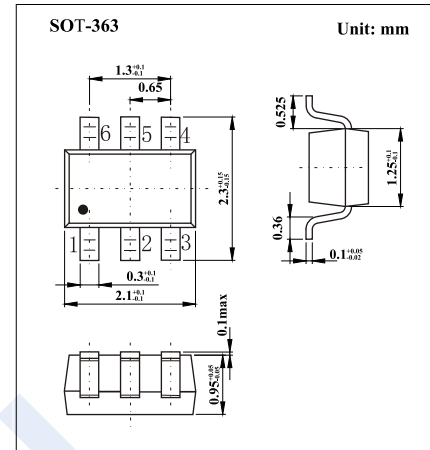
MMBD4448HCDW



MMBD4448HSDW



MMBD4448HTW


■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage	V _{RRM}	80	
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	57	mA
Average Rectified Output Current	I _O	250	
Forward Continuous Current	I _{FM}	500	A
Peak Forward Surge Current @ t=1us	I _{FSM}	4	
Peak Forward Surge Current @ t=1s		1.5	
Power Dissipation	P _d	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-65 to 150	

Switching Diodes

MMBD4448HCQW/HAQW/HADW/HCDW/HSDW/HTW
(KMBD4448HCQW/HAQW/HADW/HCDW/HSDW/HTW)
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100 \mu\text{A}$	100			
Forward voltage	V_{F1}	$I_F = 5 \text{ mA}$	0.62		0.72	V
	V_{F2}	$I_F = 10 \text{ mA}$			0.855	
	V_{F3}	$I_F = 50 \text{ mA}$			1	
	V_{F4}	$I_F = 150 \text{ mA}$			1.25	
Reverse voltage leakage current	I_{R1}	$V_R = 70 \text{ V}$			100	nA
	I_{R2}	$V_R = 75 \text{ V}, T_J = 150^\circ\text{C}$			50	μA
	I_{R3}	$V_R = 25 \text{ V}, T_J = 150^\circ\text{C}$			30	
	I_{R4}	$V_R = 20 \text{ V}$			25	nA
Junction capacitance	C_j	$V_R = 6 \text{ V}, f = 1 \text{ MHz}$			3.5	pF
Reverse recovery time	t_{rr}	$I_F = 5 \text{ mA}, V_R = 6 \text{ V}$			4	ns

■ Marking

NO.	MMBD4448 HCQW	MMBD4448 HAQW	MMBD4448 HADW	MMBD4448 HCDW	MMBD4448 HSDW	MMBD4448 HTW
Marking	KA4	KA5	KA6	KA7	KAB	KAA

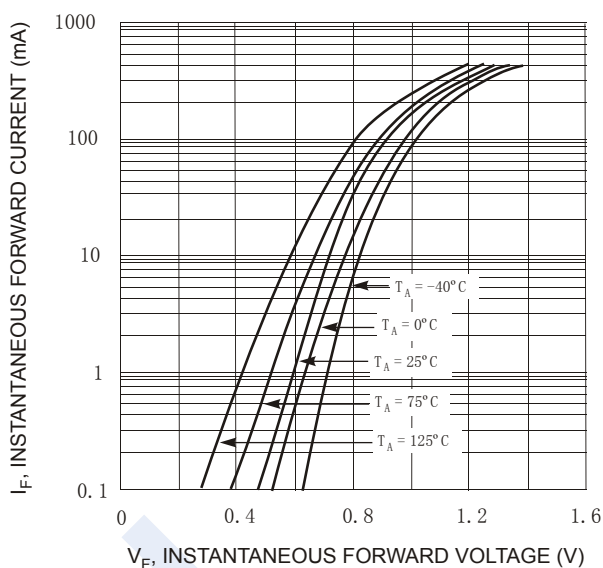
■ Typical Characteristics


Fig. 1 Typical Forward Characteristics

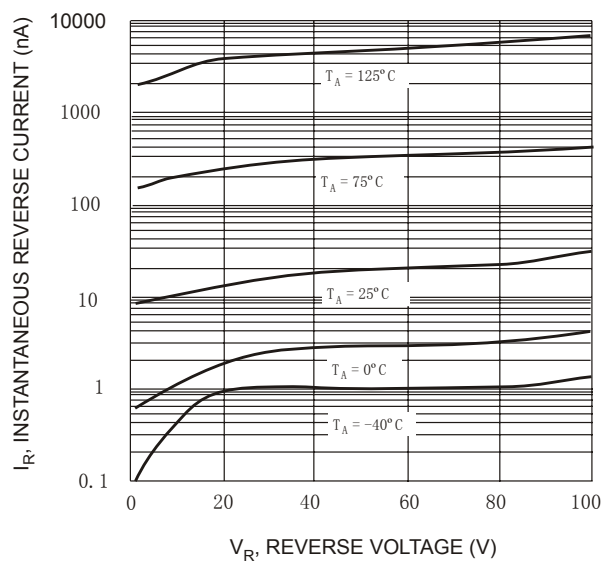


Fig. 2 Typical Reverse Characteristics

Switching Diodes

MMBD4448HCQW/HAQW/HADW/HCDW/HSDW/HTW
(KMBD4448HCQW/HAQW/HADW/HCDW/HSDW/HTW)

■ Typical Characteristics

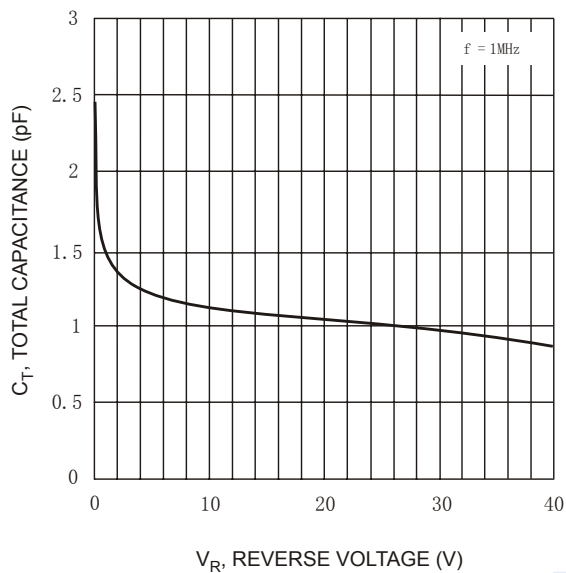


Fig. 3 Typical Capacitance vs. Reverse Voltage

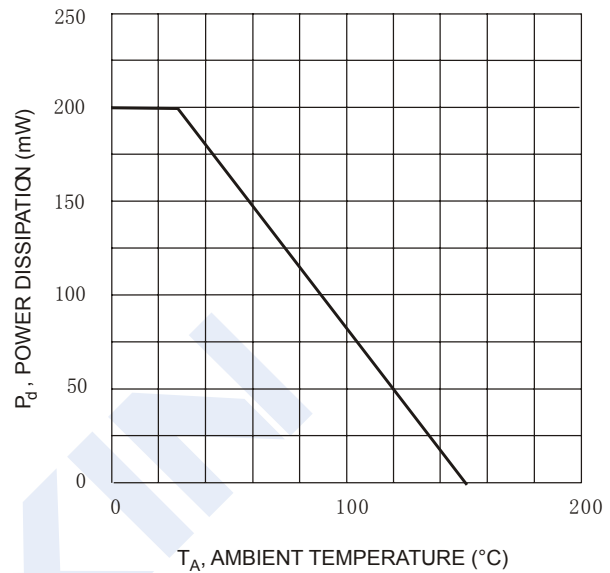


Fig. 4 Power Derating Curve, Total Package

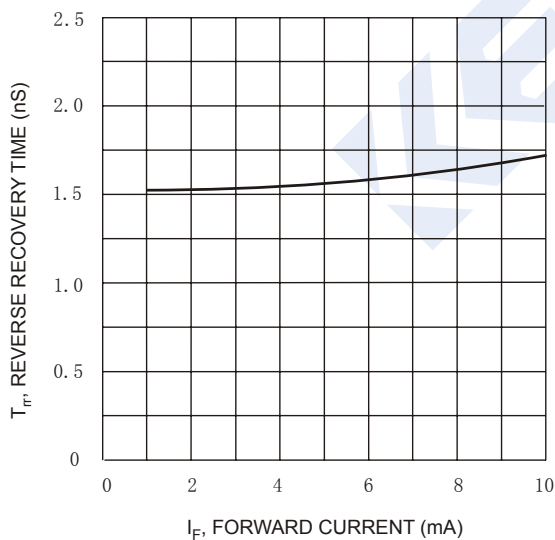


Fig. 5 Reverse Recovery Time vs. Forward Current