

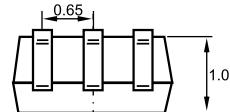
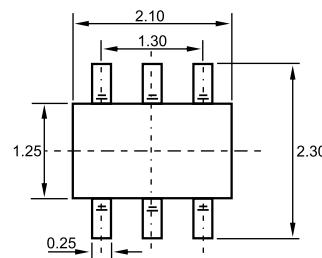
Features

- ✧ High conductance.
- ✧ Fast switching speed.
- ✧ Ultra-small surface mount package.
- ✧ For general purpose switching application.

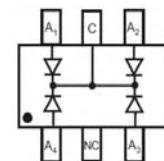
Applications

- ✧ High speed switching application.

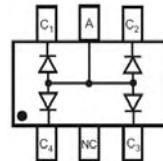
SOT-363



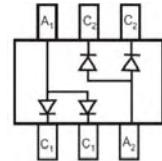
Dimensions in inches and (millimeters)



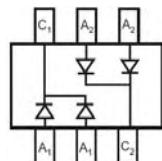
MMBD4448HCQW



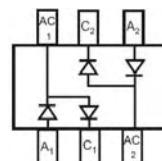
MMBD4448HAQW



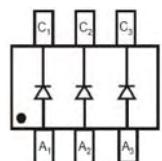
MMBD4448HADW



MMBD4448HCDW



MMBD4448HSDW



MMBD4448HTW

Ordering Information

Type No.	Marking	Package Code
MMBD4448HCQW	KA4	SOT-363
MMBD4448HAQW	KA5	SOT-363
MMBD4448HADW	KA6	SOT-363
MMBD4448HCDW	KA7	SOT-363
MMBD4448HSDW	KAB	SOT-363
MMBD4448HTW	KAA	SOT-363

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Characteristic	Value	Unit
V _{RM}	Non-Repetitive peak reverse voltage	100	V
V _{RRM}	Repetitive peak reverse Voltage		
V _{RWM}	Working peak reverse voltage	80	V
V _R	DC reverse 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}	Forward surge current @t=1.0μs @t=1.0s	4.0 2.0	A
P _D	Power Dissipation	200	mW
R _{θJA}	Thermal resistance,Junction to ambient air	625	°C/W
T _j ,T _{stg}	Junction and Storage Temperature	-65 to+150	°C

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu\text{A}$	80	-	V
Average reverse current	I_R	$V_R=70\text{V}$	-	100	nA
		$V_R=75\text{V}, T_j=150^\circ\text{C}$	-	50	uA
		$V_R=25\text{V}, T_j=150^\circ\text{C}$	-	30	uA
		$V_R=20\text{V}$	-	25	nA
Forward voltage	V_F	$I_F=5.0\text{mA}$	0.62	0.72	
		$I_F=10\text{mA}$	-	0.855	
		$I_F=100\text{mA}$	-	1.0	V
		$I_F=150\text{mA}$	-	1.25	
Total Capacitance	C_T	$V_R=6\text{V}, f=1.0\text{MHz}$	-	3.5	pF
Reverse Recovery time	t_{rr}	$I_F=5\text{mA}, V_R=6\text{V}$	-	4.0	ns

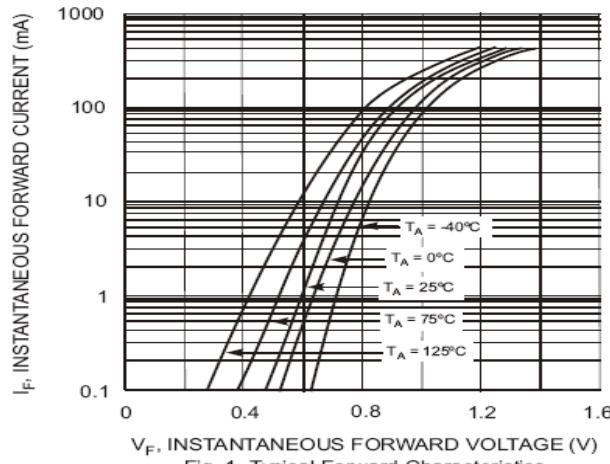
TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified


Fig. 1 Typical Forward Characteristics

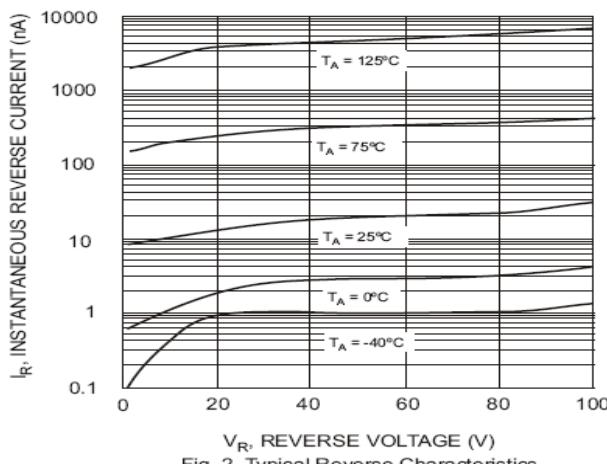


Fig. 2 Typical Reverse Characteristics

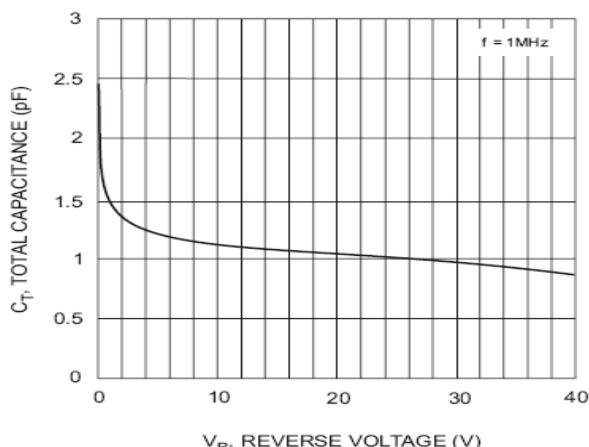


Fig. 3 Typical Capacitance vs. Reverse Voltage

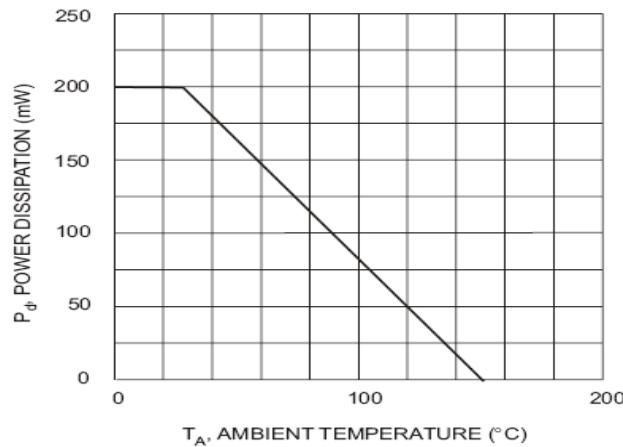


Fig. 4 Power Derating Curve, Total Package