

Surface Mount Fast Switching Diodes

MMBD4448HCQW/AQW/ADW/CDW/SDW/TW

FEATURES

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

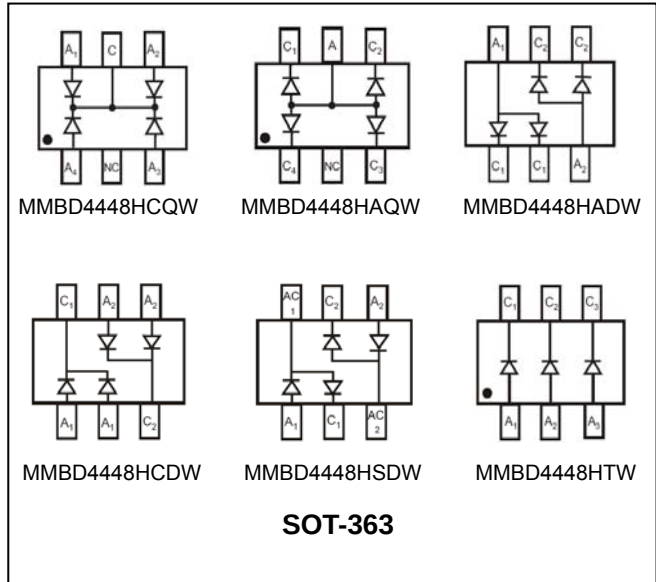


Lead-free

APPLICATIONS

- High speed switching application.

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} V_{RWM} V_R	Repetitive peak reverse Voltage Working peak reverse voltage DC reverse voltage	80	V
$V_{R(RMS)}$	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
$R_{\theta JA}$	Thermal resistance, Junction to ambient air	625	°C/W
T_j, T_{stg}	Junction and Storage Temperature	-65 to +150	°C

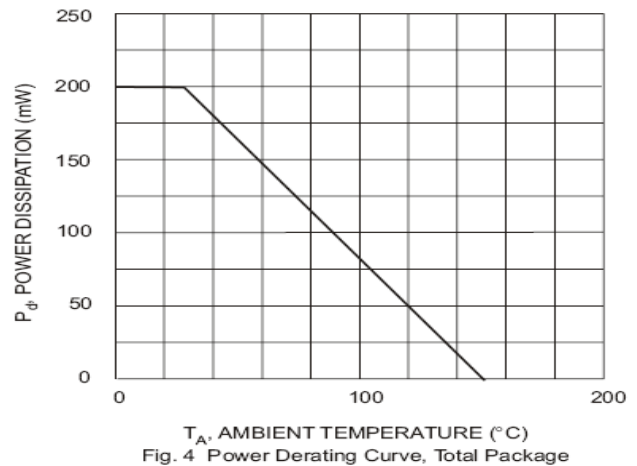
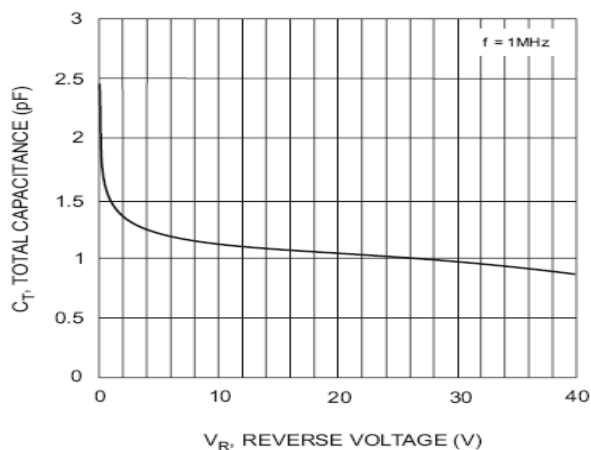
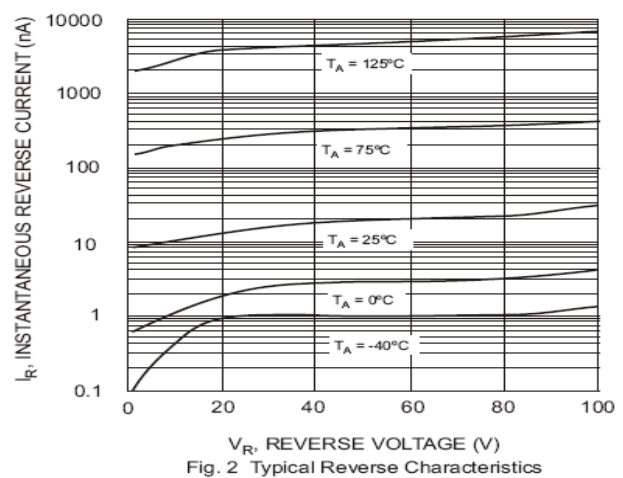
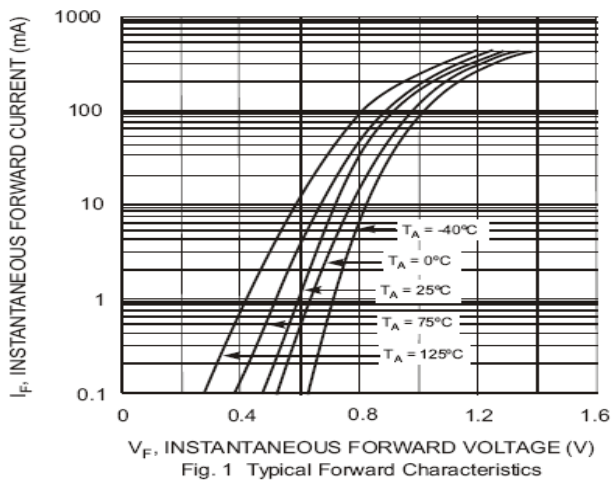
Surface Mount Fast Switching Diodes

MMBD4448HCQW/AQW/ADW/CDW/SDW/TW

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	μA
		$V_R=25\text{V}, T_j=150^\circ\text{C}$	-	30	μA
		$V_R=20\text{V}$	-	25	nA
Forward voltage	V_F	$I_F=5.0\text{mA}$	0.62	0.72	V
		$I_F=10\text{mA}$	-	0.855	
		$I_F=100\text{mA}$	-	1.0	
		$I_F=150\text{mA}$	-	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



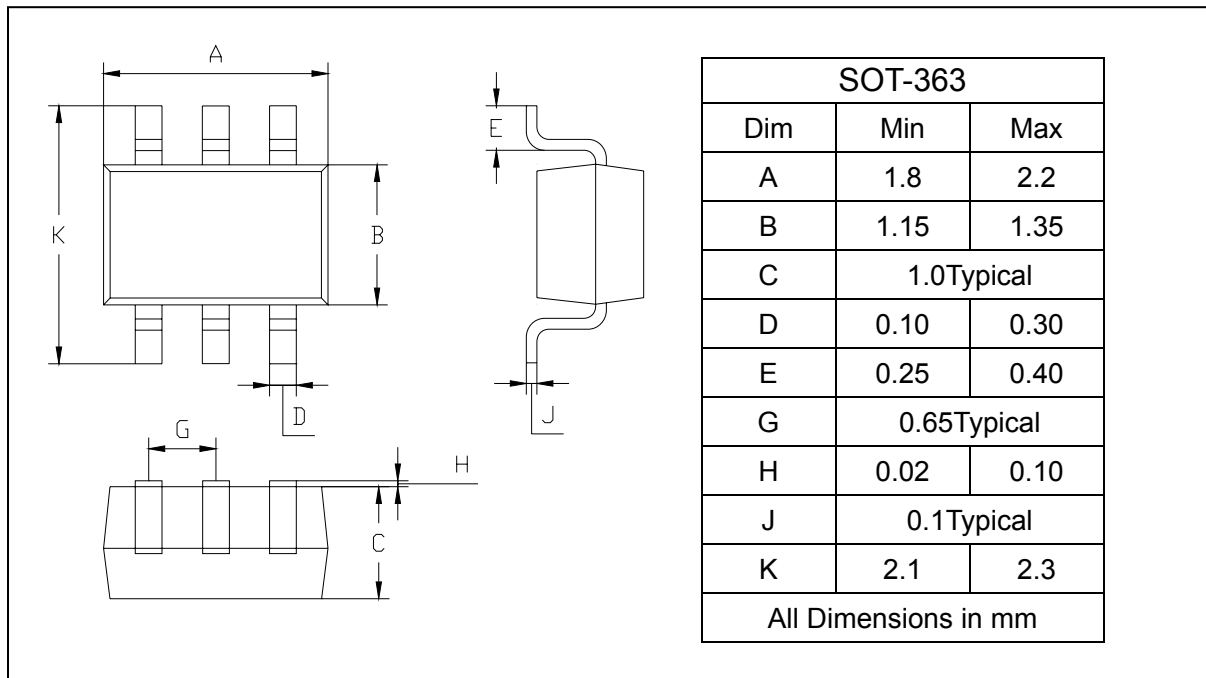
Surface Mount Fast Switching Diodes

MMBD4448HCQW/AQW/ADW/CDW/SDW/TW

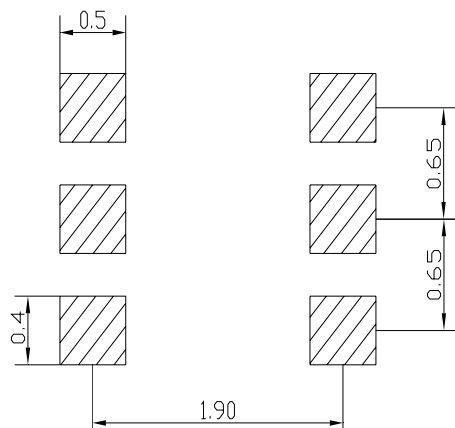
PACKAGE OUTLINE

Plastic surface mounted package

SOT-363



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMBD4448HCQW/AQW/ADW/CDW/SDW/TW	SOT-363	3000/Tape&Reel