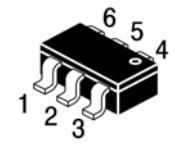
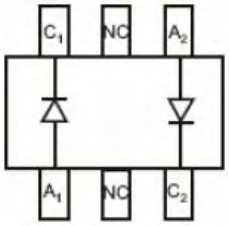
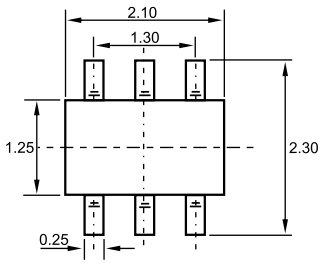
MMBD4448DW

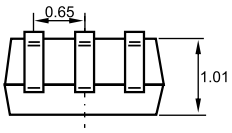
Surface Mount Fast Switching Diodes





SOT-363





Dimensions in inches and (millimeters)

Features

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

Applications

- ✧ For general purpose switching application.

Ordering Information

Type No.	Marking	Package Code
MMBD4448DW	KA3	SOT-363

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Characteristic	Value	Unit
V_{RM}	Non-repetitive peak reverse Voltage	100	V
V_{RRM} V_{RWM} V_R	Peak repetitive reverse Voltage Working peak reverse voltage DC reverse voltage	75	V
$V_{R(RMS)}$	RMS Reverse voltage	53	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<1.0μs @t<1.0s	 4 2	A
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	625	℃/W
T_j, T_{stg}	Junction and Storage Temperature	-65 to+150	℃

MMBD4448DW

Surface Mount Fast Switching Diodes

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	I_R=10μA	75		V
Forward voltage	V_F	I_F=5.0mA I_F=10mA I_F=50mA I_F=150mA	0.62	0.720 0.855 1.0 1.25	V
Reverse current	I_R	V_R=75V V_R=75V，T_j=150℃ V_R=25V，T_j=150℃ V_R=20V		2.5 50 30 25	μA μA μA nA
Total Capacitance	C_T	V_{CB}=10V,f=1.0MHz,I_E=0		4.0	pF
Reverse Recovery time	t_{rr}	I_F=I_R=10mA,I_{rr}=0.1*I_R,R_L=100Ω		4.0	ns

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

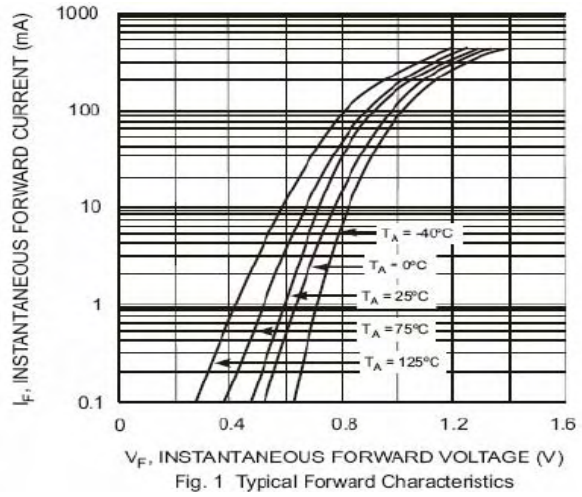


Fig. 1 Typical Forward Characteristics

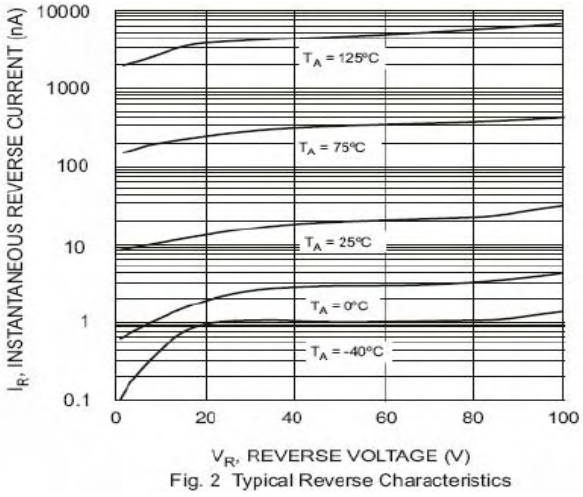


Fig. 2 Typical Reverse Characteristics

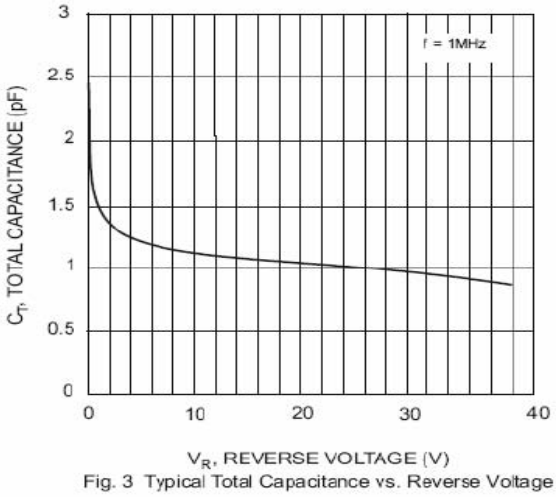


Fig. 3 Typical Total Capacitance vs. Reverse Voltage

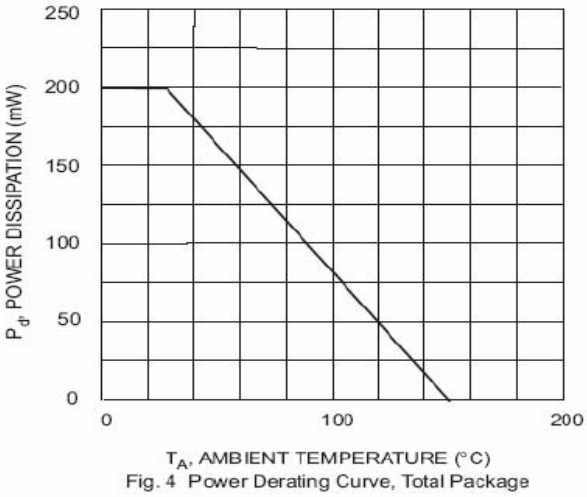


Fig. 4 Power Derating Curve, Total Package