

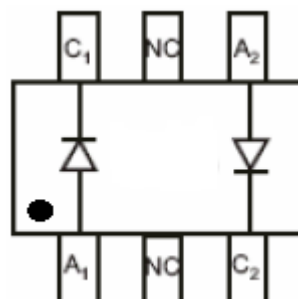


FEATURES

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

APPLICATIONS

- For general purpose switching application



ORDERING INFORMATION

SOT-363

Type No.	Marking	Package Code
MMBD4448DW	KA3	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}	Peak repetitive reverse Voltage	75	V
V_{RWM}	Working peak reverse voltage		
V_R	DC reverse voltage		
$V_{R(RMS)}$	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	4	A
	@t<1.0μs		
	@t<1.0s	2	
P_D	Power Dissipation	200	mW
$R_{θJA}$	Thermal Resistance, Junction to Ambient	625	°C/W
T_J, T_{STG}	Junction and Storage Temperature	-65 to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=10\mu A$	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	$V_R=75V$ $V_R=75V, T_j=150^\circ C$ $V_R=25V, T_j=150^\circ C$ $V_R=20V$		2.5 50 30 25	μA μA μA nA
Total Capacitance	C_T	$V_R=10V, f=1.0MHz, I_E=0$		4.0	pF
Reverse Recovery time	t_{rr}	$I_F=I_R=10mA, I_{tr}=0.1 \cdot I_R, R_L=100\Omega$		4.0	ns

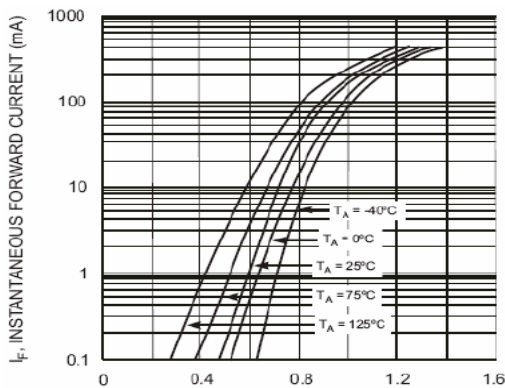
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified


Fig. 1 Typical Forward Characteristics

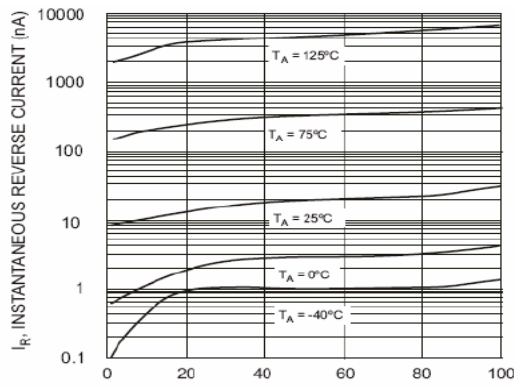


Fig. 2 Typical Reverse Characteristics

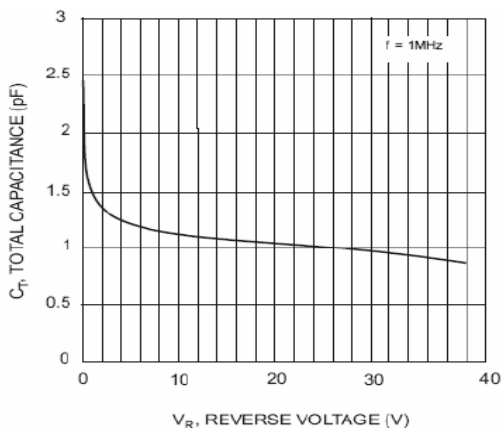


Fig. 3 Typical Total Capacitance vs. Reverse Voltage

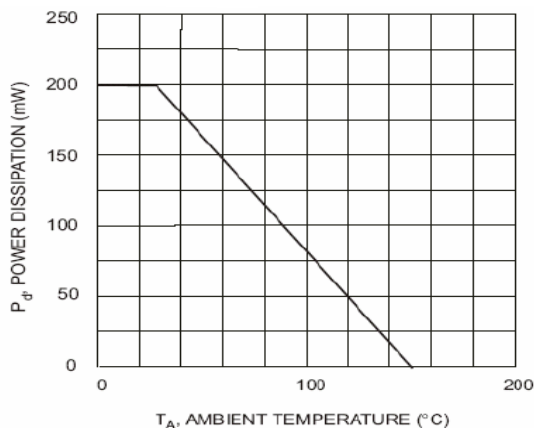
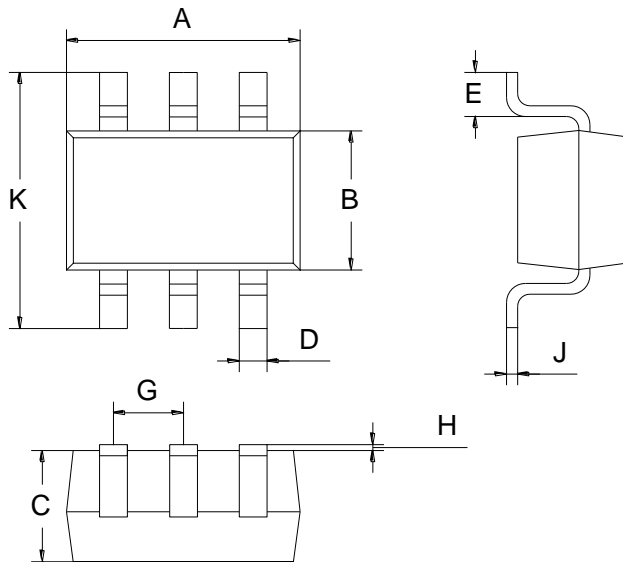


Fig. 4 Power Derating Curve, Total Package

PACKAGE OUTLINE

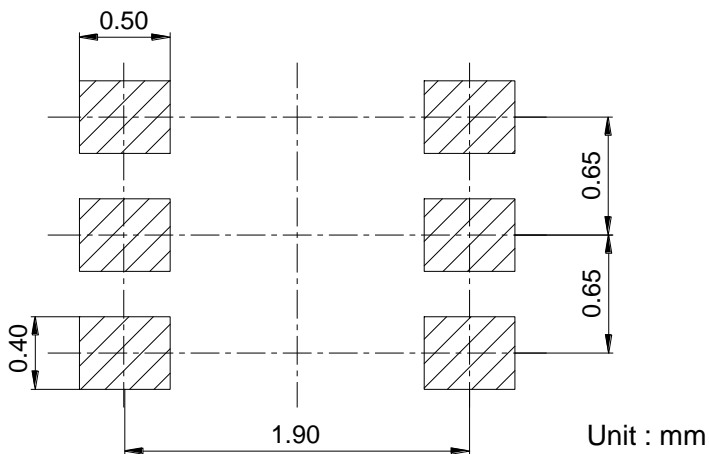
Plastic surface mounted package

SOT-363



SOT-363		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40
All Dimensions in mm		

SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
MMBD4448DW	SOT-363	3000pcs / Tape & Reel