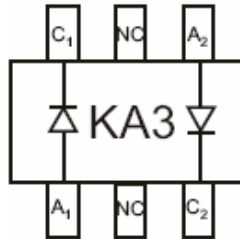


MMBD4448DW

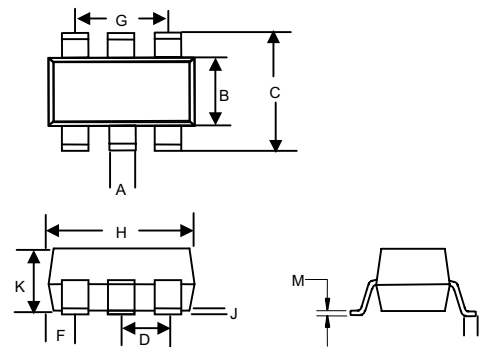
200mW Switching Diodes

Features

- For General Purpose Switching Applications
- Case Material: Molded Plastic. UL Flammability Classification Rating 94-0 and MSL Rating 1
- Ultra-Small Surface Mount Package
- High Conductance, Power Dissipation
- Fast Switching Speed



SOT-363



Maximum Ratings

Symbol	Rating	Rating	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 Blocking 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}	Peak Forward Surge Current @ 1.0 μ s	4.0	A
		@ 1.0s	
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	625	$^{\circ}C/W$
P_D	Power dissipation	200	mW
T_J	Junction Temperature	150	$^{\circ}C$
T_{STG}	Storage Temperature	-65 to +150	$^{\circ}C$

Electrical Characteristics @ 25 $^{\circ}C$ Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	75V	---	$I_R=10 \mu A$
I_R	Reverse Voltage Leakage Current	---	2.5 μA	$V_R=75V$
			50 μA	$V_R=75V, T_J=150^{\circ}C$
			35 μA	$V_R=25V, T_J=150^{\circ}C$
V_F	Forward Voltage	---	0.72V	$I_F=5.0mA$
			0.855V	$I_F=10mA$
			1.0V	$I_F=50mA$
C_T	Total Capacitance	---	1.25V	$I_F=150mA$
			4.0pF	$V_R=0V, f=1MHz$
t_{rr}	Reverse Recovery Time	---	4.0ns	$I_R=I_F=10mA, I_{rr}=0.1 \times I_R, R_L=100 \Omega$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.004	.012	0.10	0.30	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026		0.65Nominal		
F	.012	.016	0.30	0.40	
H	.071	.087	1.80	2.20	
J	---	.004	---	0.10	
K	.035	.039	0.90	1.00	
L	.010	.016	0.25	0.40	
M	.004	.016	0.10	0.25	

MMBD4448DW

TM

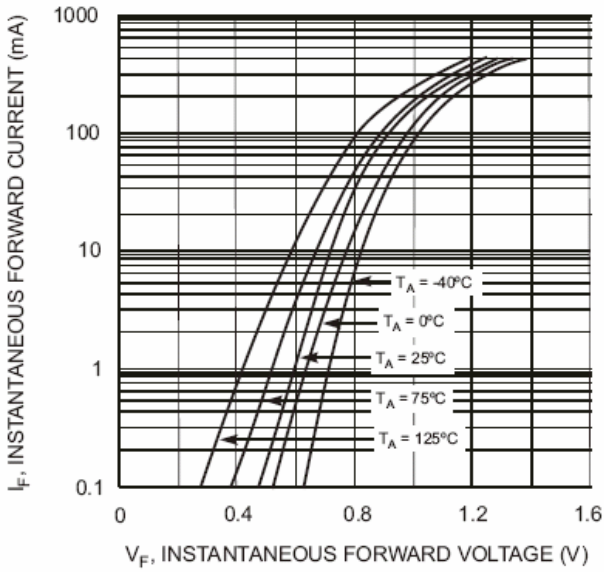


Fig. 1 Typical Forward Characteristics

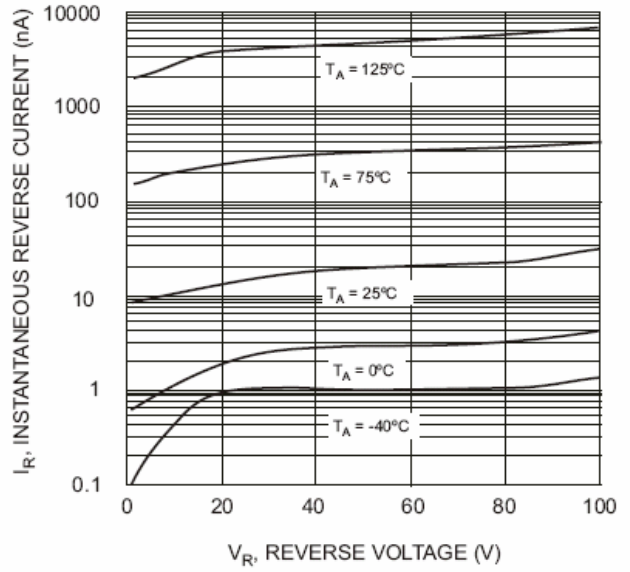


Fig. 2 Typical Reverse Characteristics

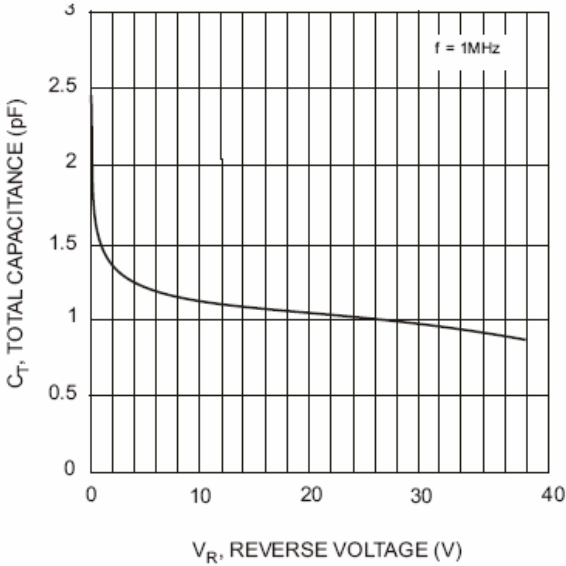


Fig. 3 Typical Total Capacitance vs. Reverse Voltage

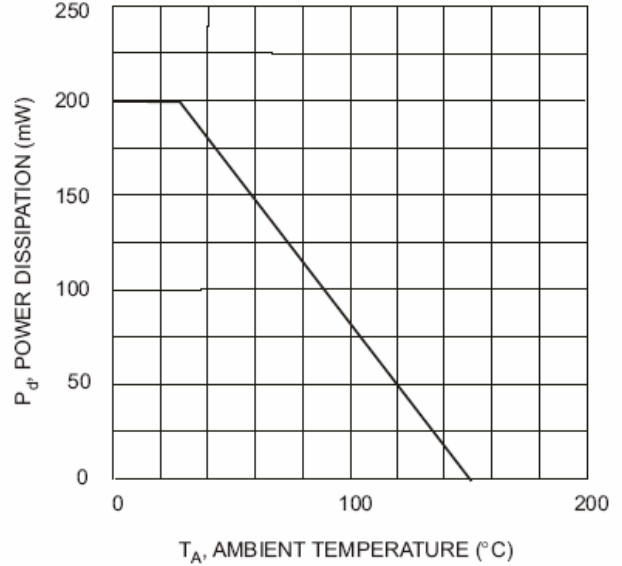


Fig. 4 Power Derating Curve, Total Package

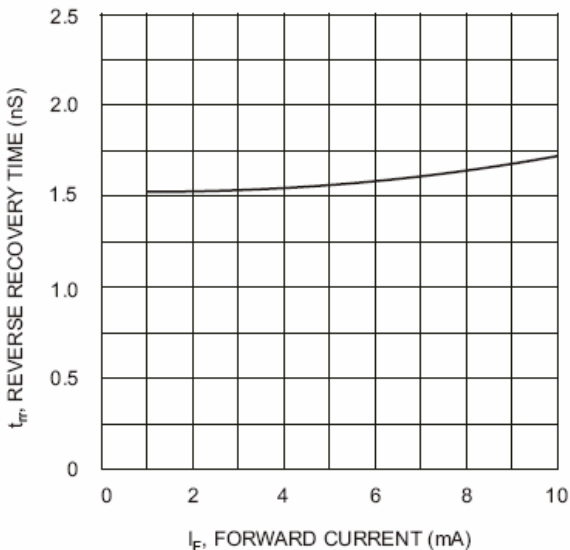


Fig. 5 Reverse Recovery Time vs. Forward Current

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

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