

## Features

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- High Conductance, Power Dissipation
- For General Purpose Switching Applications
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Maximum Ratings

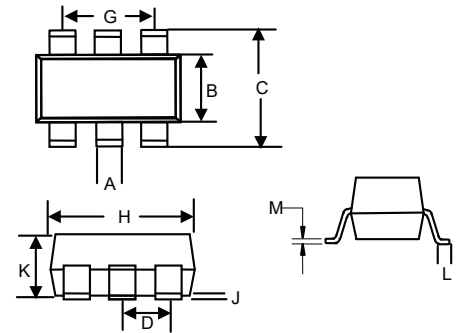
- Operating Junction Temperature Range: 150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 625°C/W Junction to Ambient

MCC Part Number	Device Marking	Repetitive Peak Reverse Voltage $V_{RRM}$	RMS Reverse Voltage $V_{R(RMS)}$	DC Blocking Voltage $V_R$
MMBD4448HAQW	KA5	80V	57V	80V
MMBD4448HADW	KA6	80V	57V	80V
MMBD4448HCDW	KA7	80V	57V	80V
MMBD4448HSDW	KAB	80V	57V	80V
MMBD4448HCQW	KA4	80V	57V	80V
MMBD4448HTW	KAA	80V	57V	80V

Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100V	
Working Peak Reverse Voltage	$V_{RWM}$	80V	
Forward Continuous Current	$I_{FM}$	500mA	
Average Rectified Output Current	$I_o$	250mA	
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	4.0A 1.5A	@ t=1.0us @ t=1.0s
Power Dissipation	$P_D$	200mW	

# 200mW Switching Diodes

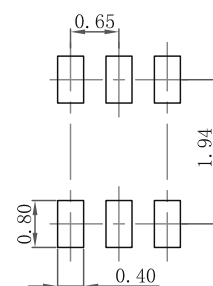
## SOT-363



### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.006	0.014	0.15	0.35	
B	0.045	0.053	1.15	1.35	
C	0.079	0.096	2.00	2.45	
D	0.026		0.65 Nominal		
G	0.047	0.055	1.20	1.40	
H	0.071	0.087	1.80	2.20	
J	-----	0.004	-----	0.10	
K	0.031	0.043	0.80	1.10	
L	0.010	0.018	0.26	0.46	
M	0.003	0.006	0.08	0.15	

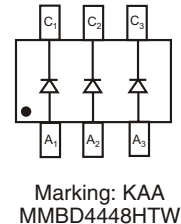
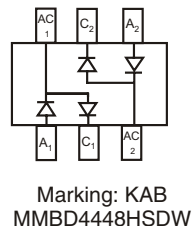
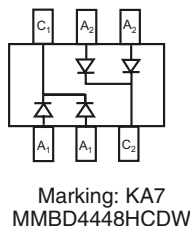
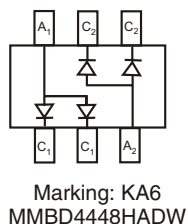
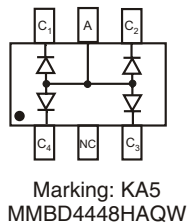
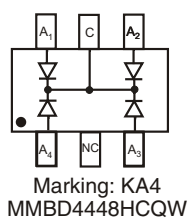
### Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

Minimum Breakdown Voltage	$V_{BR}$	80V	$I_R=100\mu A$
Maximum Forward Voltage	$V_F$	0.720V 0.855V 1.000V 1.250V	$I_F=5.0mA$ $I_F=10.0mA$ $I_F=50.0mA$ $I_F=150.0mA$
Minimum Forward Voltage	$V_F$	0.620V	$I_F=5.0mA$
Maximum Peak Reverse voltage	$I_R$	50 $\mu A$ 30 $\mu A$ 25 $\mu A$ 100nA	$V_R=75V, T_j=150^\circ C$ $V_R=25V, T_j=150^\circ C$ $V_R=20V$ $V_R=70V$
Maximum Total Capacitance	$C_T$	3.5pF	$V_R=6.0V, f=1.0MHz$
Maximum Reverse Recovery Time	$t_{rr}$	4.0ns	$I_F=5mA, V_R=6V$

Internal Structure



## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

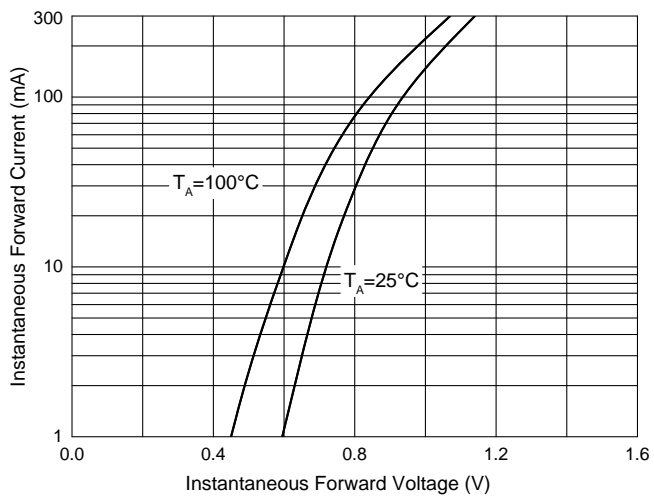


Fig. 2 - Typical Reverse Leakage Characteristics

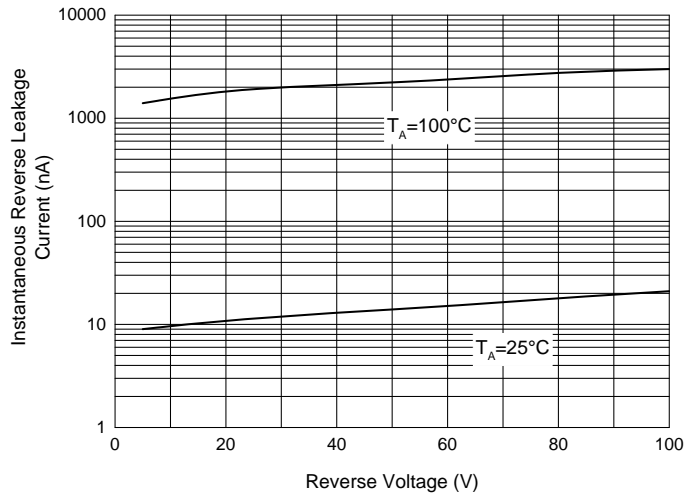
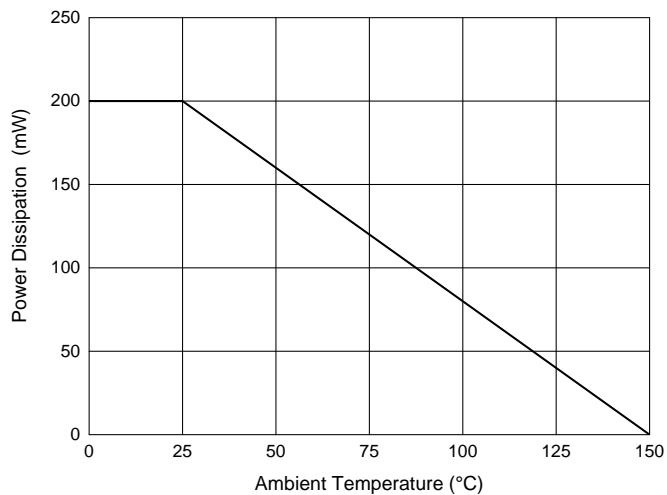


Fig. 3 - Power Derating Curve



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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