

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Micro Commercial Components



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MMBD4448HAQW/ ADW/CDW/SDW/ **CQW/TW**

Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance, Power Dissipation
- Ultra-Small Surface Mount Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P"Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

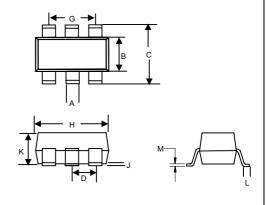
Symbol	Rating	Rating	Unit	
V_{RM}	Non-Repetitive Peak Reverse Voltage 100		V	
V_{RRM}	Peak Repetitive Reverse Voltage			
V_{RWM}	Working Peak Reverse Voltage	Working Peak Reverse Voltage 80		
V_{R}	DC Blocking Voltage			
$V_{R(RMS)}$	RMS Reverse Voltage	57	V	
I _{FM}	Forward Continuous Current	500	mA	
Io	Average Rectified Output Current	250	mA	
I _{FSM}	Peak Forward Surge Current @1.0 μ s	4.0	Α	
	@1.0s	1.5	A	
R∍JA	Thermal Resistance Junction to Ambient	625	°C/W	
P _D	Power dissipation	200	mW	
T_J	Junction Temperature	150	$^{\circ}\!\mathbb{C}$	
T _{STG}	Storage Temperature	-65 to +150	$^{\circ}\mathbb{C}$	

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	80V		I _R =100 μ A
I _R	Reverse Voltage Leakage Current		100nA	V _R =70V
			50 μ A	V _R =75V, T _J =150°C
			30 μ A	V _R =25V, T _J =150°C
			25nA	$V_R=20V$
V_{F}	Forward Voltage	0.62	0.72V	$I_F=5.0mA$
			0.855V	$I_F=10mA$
			1.0V	$I_F=50mA$
			1.25V	$I_F=150mA$
C_T	Total Capacitance		3.5pF	V _R =6V, f=1MHZ
t _{rr}	Reverse Recovery Time		4.0ns	I _F =5mA, VR=6V

200mW **Switching Diodes**

SOT-363



	DIMENSIONS					
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.006	.014	0.15	0.35		
В	.045	.053	1.15	1.35		
С	.085	.096	2.15	2.45		
D	.026		0.65Nominal			
G	.047	.055	1.20	1.40		
Н	.071	.087	1.80	2.20		
J		.004		0.10		
K	.035	.043	0.90	1.10		
L	.010	.018	0.26	0.46		
M	.003	.006	0.08	0.15		



Marking: KA4 MMBD4448HCQW



Marking: KA5 MMBD4448HAQW



Marking: KA6 MMBD4448HADW



Marking: KA7 MMBD4448HCDW

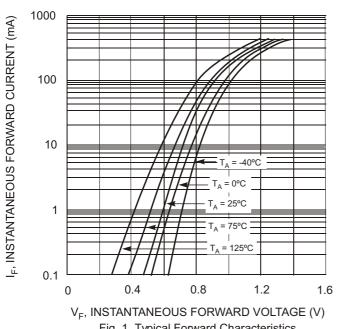


Marking: KAB MMBD4448HSDW



Marking: KAA MMBD4448HTW

MMBD4448HCQW/AQW/ADW/CDW/SDW/TW



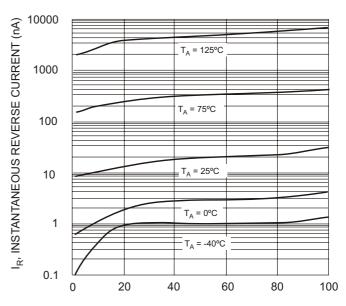
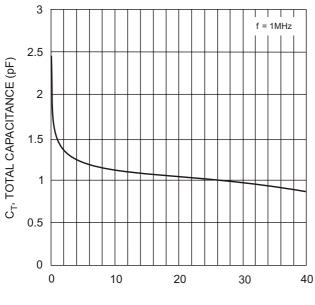
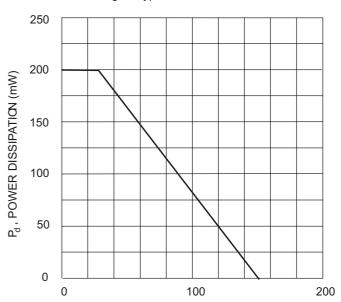


Fig. 1 Typical Forward Characteristics

V_R, REVERSE VOLTAGE (V) Fig. 2 Typical Reverse Characteristics





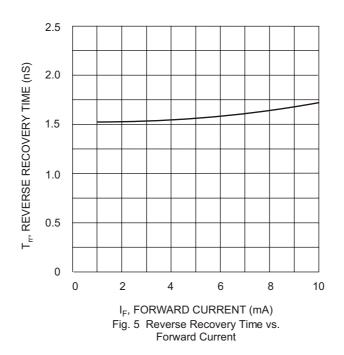
V_R, REVERSE VOLTAGE (V) Fig. 3 Typical Capacitance vs. Reverse Voltage

T_A, AMBIENT TEMPERATURE (°C) Fig. 4 Power Derating Curve, Total Package

Revision: B 2013/01/01









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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