Elektronische Bauelemente

MMBD4448HAQW
ADW/CDW/SDW/TW
Surface Mount Switching Diode Array

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

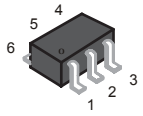
SOT-363

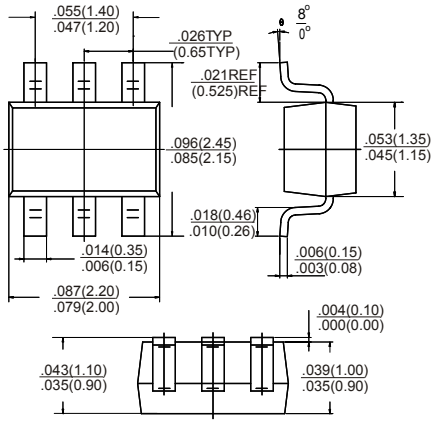
FEATURES

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- High Conductance Power dissipation

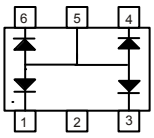
MECHANICAL DATA

- Case: SOT-363, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Weight: 0.006 grams (approx.)
- Mounting Position: Any

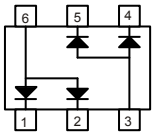




Dimensions in inches and (millimeters)



MMBD4448HAQW
Marking: KA5



MMBD4448HADW
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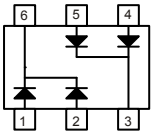

MMBD4448HCDW
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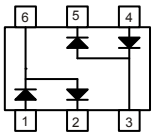

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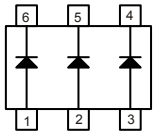

MMBD4448HTW
Marking: KAA

MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Rating	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	80	V
RMS Reverse Voltage	$V_{R(RMS)}$	57	V
Average Rectified out Current(Note 1)	I_o	250	mA
Forward Continuous Current (Note 1)	I_{FM}	500	mA
Thermal Resistance Junction to Ambient Air (Note1)	R_{thJA}	625	°C/W
Storage Temperature Range	T_{stg}	−55 to +150	°C

Notes: 1. Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch; pad layout as shown on Diodes Inc. suggested pad layout

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted) (EACH DIODE)

Characteristic		Symbol	Min	Max	Unit
Reverse Breakdown Voltage (Note 2)		V(BR)R	80	Ð	V
Forward Voltage (Note 2)	IF=5.0mA	V_F	0.62	0.72	V
	IF=10mA		—	0.855	
	IF=100mA		—	1.0	
	IF=150mA		—	1.25	
Reverse Current (Note 2)	VR=70V	I_R	—	100	nA
	VR=75V, Tj=150°C		—	50	uA
	VR=25V, Tj=150°C		—	30	uA
	VR=20V		—	25	nA
Total Capacitance VR=6V, f=1.0MHz		C_T	—	3.5	pF
Reverse Recovery Time IF=IR=10mA, Irr=0.1XIR,RL=100 Ohms		t_{rr}	—	4.0	nS

Note 2. Short duration test pulse used to minimize self-heating.

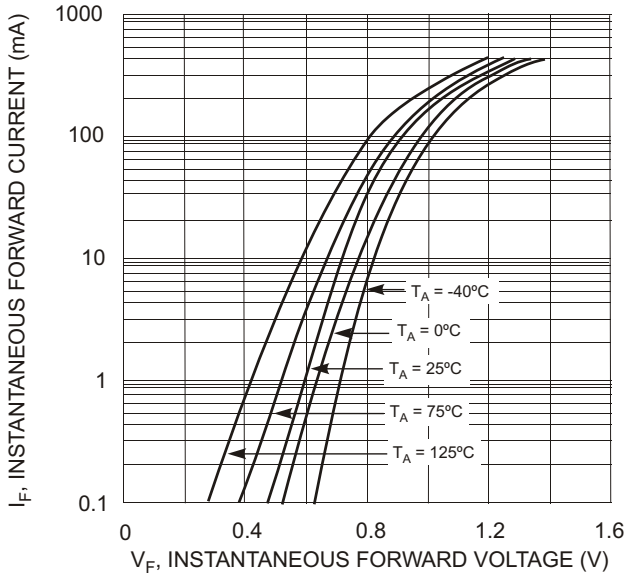

Fig. 1 Typical Forward Characteristics

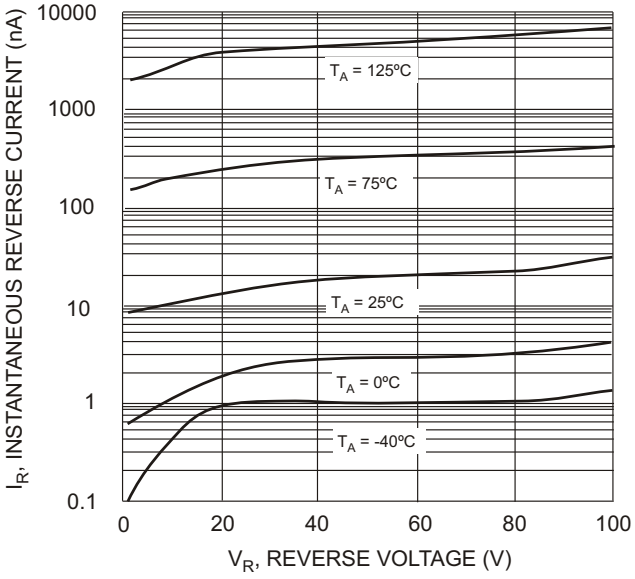

Fig. 2 Typical Reverse Characteristics

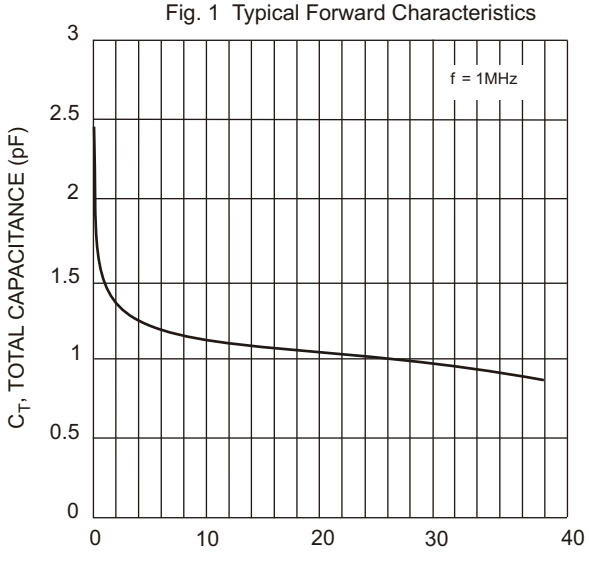

Fig. 3 Typical Total Capacitance vs. Reverse Voltage

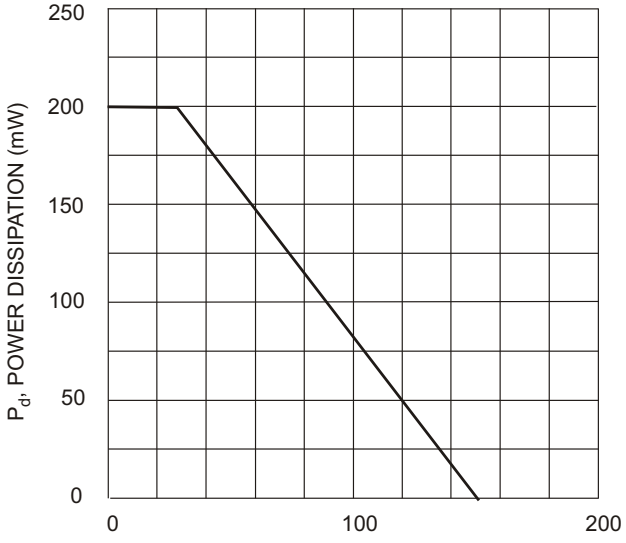

Fig. 4 Power Derating Curve, Total Package

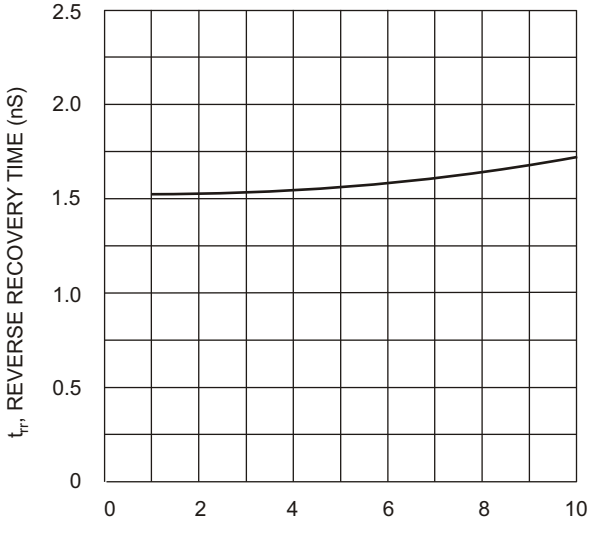

Fig. 5 Reverse Recovery Time vs Forward Current.