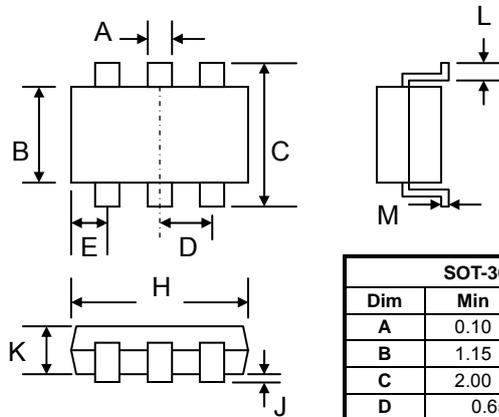


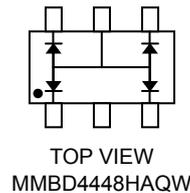
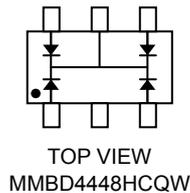
Features

- Quad Diode Common Cathode or Anode
- Fast Switching
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- Plastic Material – UL Recognition Flammability Classification 94V-0



Mechanical Data

- Case: SOT-363, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.006 grams (approx.)
- Mounting Position: Any
- Marking: Device Code, See Page 3
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	80	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Repetitive Peak Forward Current	I_{FRM}	500	mA
Continuous Forward Current	I_O	250	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	@ $t = 1.0\mu\text{s}$ 4.0	A
		@ $t = 1.0\text{s}$ 1.0	
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

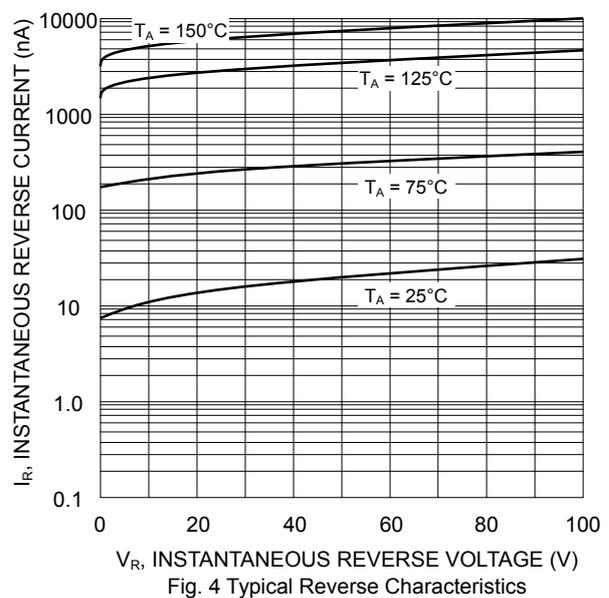
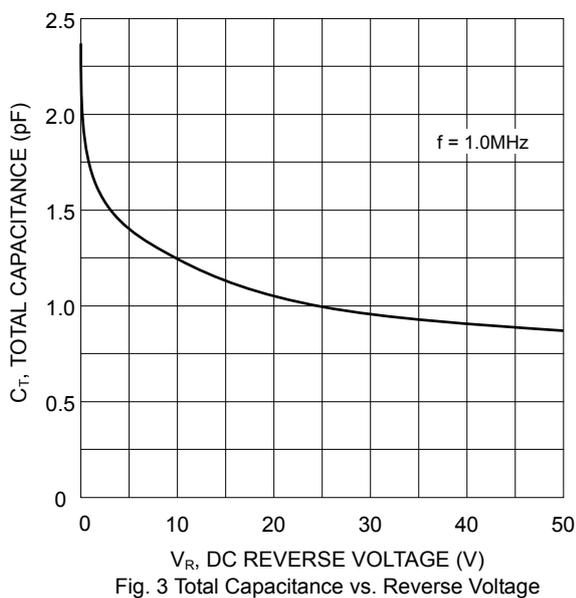
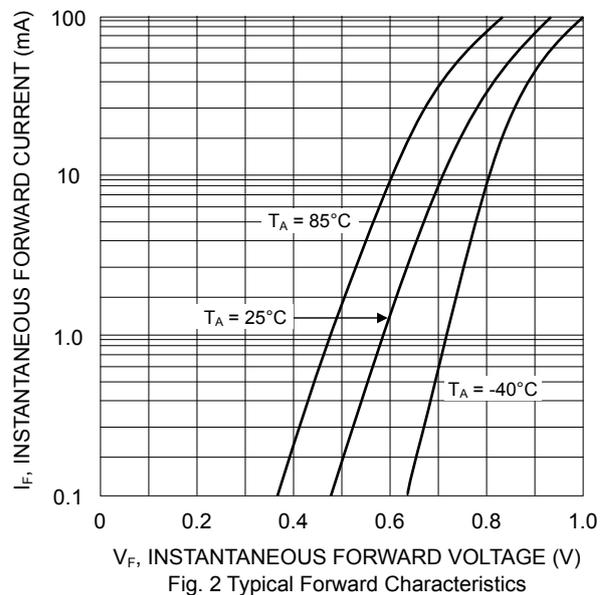
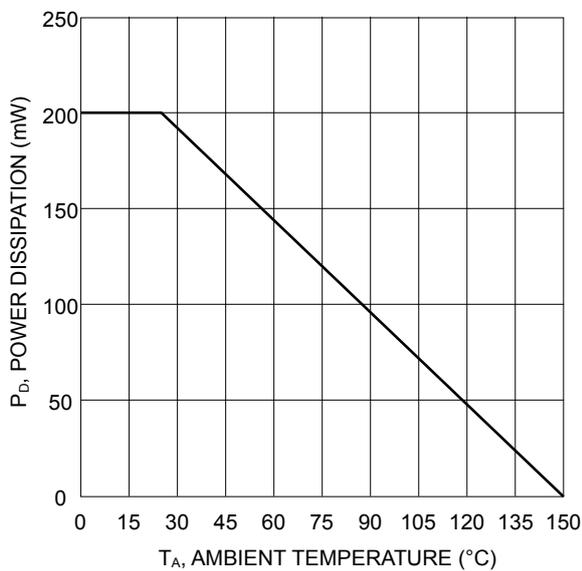
Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	P_D	200	mW
Thermal Resistance, Junction to Ambient (Note 1)	R_{JA}	625	$^\circ\text{C/W}$

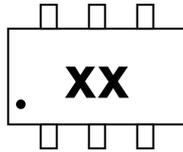
Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.

Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage @ $I_R = 100\mu\text{A}$	$V_{(BR)}$	80			V
Forward Voltage Drop @ $I_F = 5.0\text{mA}$ @ $I_F = 10\text{mA}$ @ $I_F = 100\text{mA}$ @ $I_F = 150\text{mA}$	V_{FM}			0.72 0.855 1.0 1.25	V
Peak Reverse Leakage Current @ $V_R = 70\text{V}, T_J = 25^\circ\text{C}$ @ $V_R = 25\text{V}, T_J = 150^\circ\text{C}$ @ $V_R = 75\text{V}, T_J = 150^\circ\text{C}$	I_{RM}			0.1 30 50	μA
Diode Capacitance ($V_R = 6.0\text{V}, f = 1.0\text{MHz}$)	C_D			3.5	pF
Reverse Recovery Time ($I_F = I_R = 5.0\text{mA}, V_R = 6.0\text{V}, R_L = 100\Omega$)	t_{rr}			4.0	nS



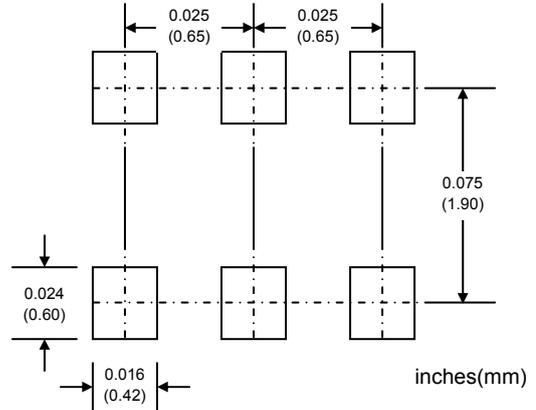
MARKING INFORMATION



xx = Device Code, See Table Below

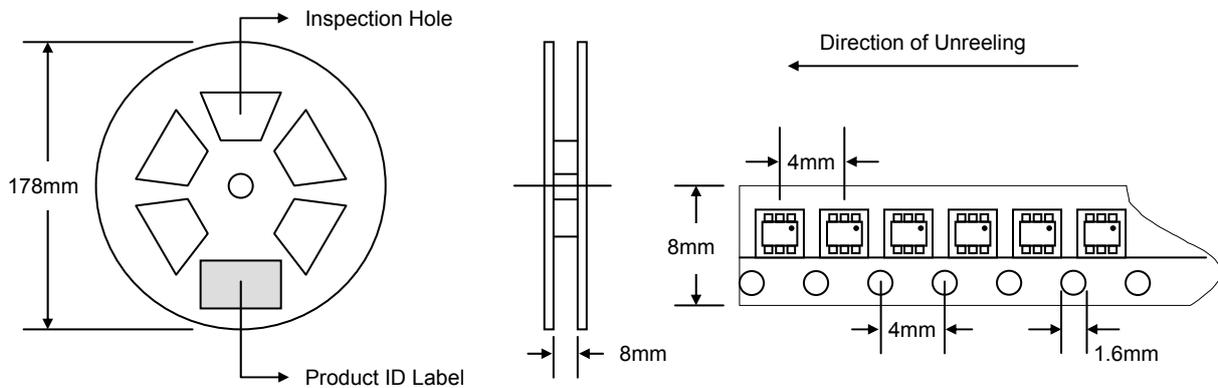
MMBD4448HCQW	MMBD4448HAQW
KA4	KA5

RECOMMENDED FOOTPRINT



PACKAGING INFORMATION

TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	187 x 187 x 65	15,000	390 x 240 x 420	150,000	10.0

Note: 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.
2. Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
MMBD4448HCQW-T1	SOT-363	3000/Tape & Reel
MMBD4448HAQW-T1	SOT-363	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, MMBD4448HCQW-T1-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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