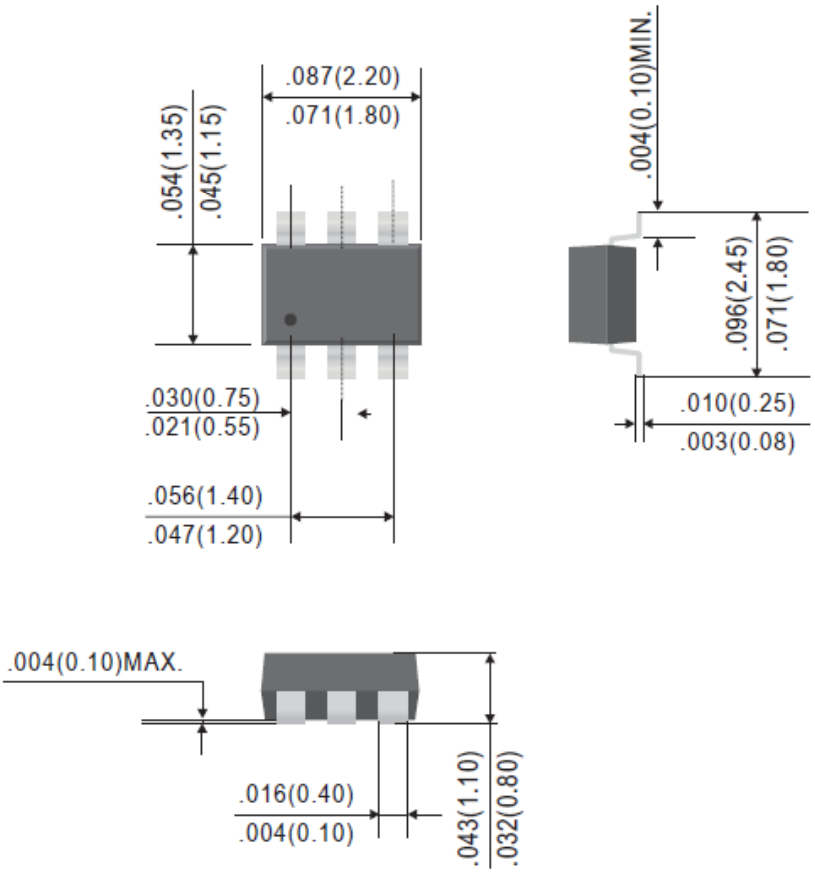
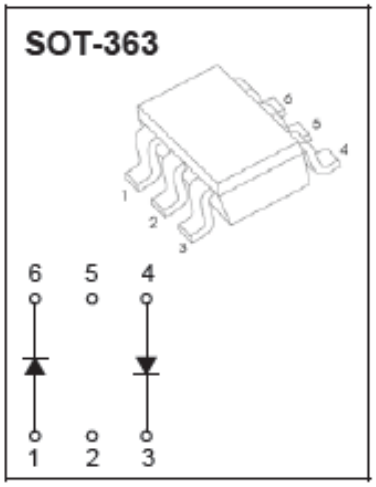
MMBD4448TW

SWITCHING DIODE





Dimensions in inches and (millimeters)

FEATURES

·Fast Switching Speed
·Ultra-Small Surface Mount Package
·For General Purpose Switching Applications
·High Conductance Power Dissipation
·Pb-Free package is available
·RoHS product for packing code suffix "G"
·Halogen free product for packing code suffix "H"
·Moisture Sensitivity Level 1

MARKING: KA3

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Maximum Ratings (T_A=25°C unless otherwise noted)			
Parameter	**Symbol**	**Limit**	**Unit**
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current (Note 1)	I_{FM}	500	mA
Average Rectified Output Current (Note 1)	I_O	250	mA
Non-Repetitive Peak Forward Surge Current @ t < 1μs @ t < 1s	I_{FSM}	4 1.5	A
Power Dissipation (Note 1)	P_D	200	mW
Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55~+150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)					
Parameter	**Symbol**	**Test conditions**	**Min.**	**Max.**	**Unit**
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	I_R= 10μA	75	—	V
Forward Voltage (Note 2)	V_F	I_F=5mA	0.62	0.72	V
		I_F=10mA	—	0.855	
		I_F=50mA	—	1	
		I_F=150mA	—	1.25	
Reverse Current (Note 2)	I_R	V_R=75V	—	2.5	μA
		V_R=75V, T_J = 150°C	—	50	μA
		V_R=25V, T_J = 150°C	—	30	μA
		V_R=25V	—	25	nA
Total capacitance	C_T	V_R=0V, f=1MHz	—	4	pF
Reverse Recovery Time	t_{rr}	I_F= I_R=10mA, I_{rr}=0.1×I_R, R_L=100Ω	—	4	ns

Notes: 1. Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch.

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