



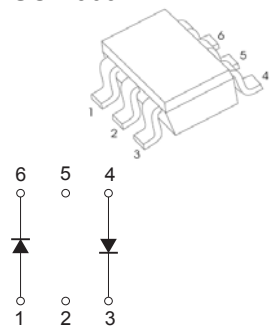
SOT-363 Plastic-Encapsulate Diode

Switching Diode

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**

SOT-363



MARKING:KA3

Maximum Ratings @ Ta= 25°C unless otherwise specified

Characteristic	Symbol	Value	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 @ $t < 1$ s @ $t < 1$ s	I_{FSM}	4 1.5	A
Power Dissipation (Note 1)	P_d	200	mW
Thermal Resistance Junction to Ambient (Note 1)	R_{JA}	625	°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55~+150	°C

Electrical Characteristics @ Ta = 25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Conditions
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	75		V	$I_R = 10$ A
Forward Voltage (Note 2)	V_F	0.62	0.720 0.855 1.0 1.25	V	$I_F = 5.0$ mA $I_F = 10$ mA $I_F = 50$ mA $I_F = 150$ mA
Reverse Current (Note 2)	I_R		2.5 50 30 25	A A A nA	$V_R = 75$ V $V_R = 75$ V, $T_j = 150$ °C $V_R = 25$ V, $T_j = 150$ °C $V_R = 20$ V
Total Capacitance	C_T		4.0	pF	$V_R = 0$, $f = 1.0$ MHz
Reverse Recovery Time	t_{rr}		4.0	ns	$I_F = I_R = 10$ mA, $t_{rr} = 0.1 \times I_R$, $R_L = 100$

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.



WILLAS

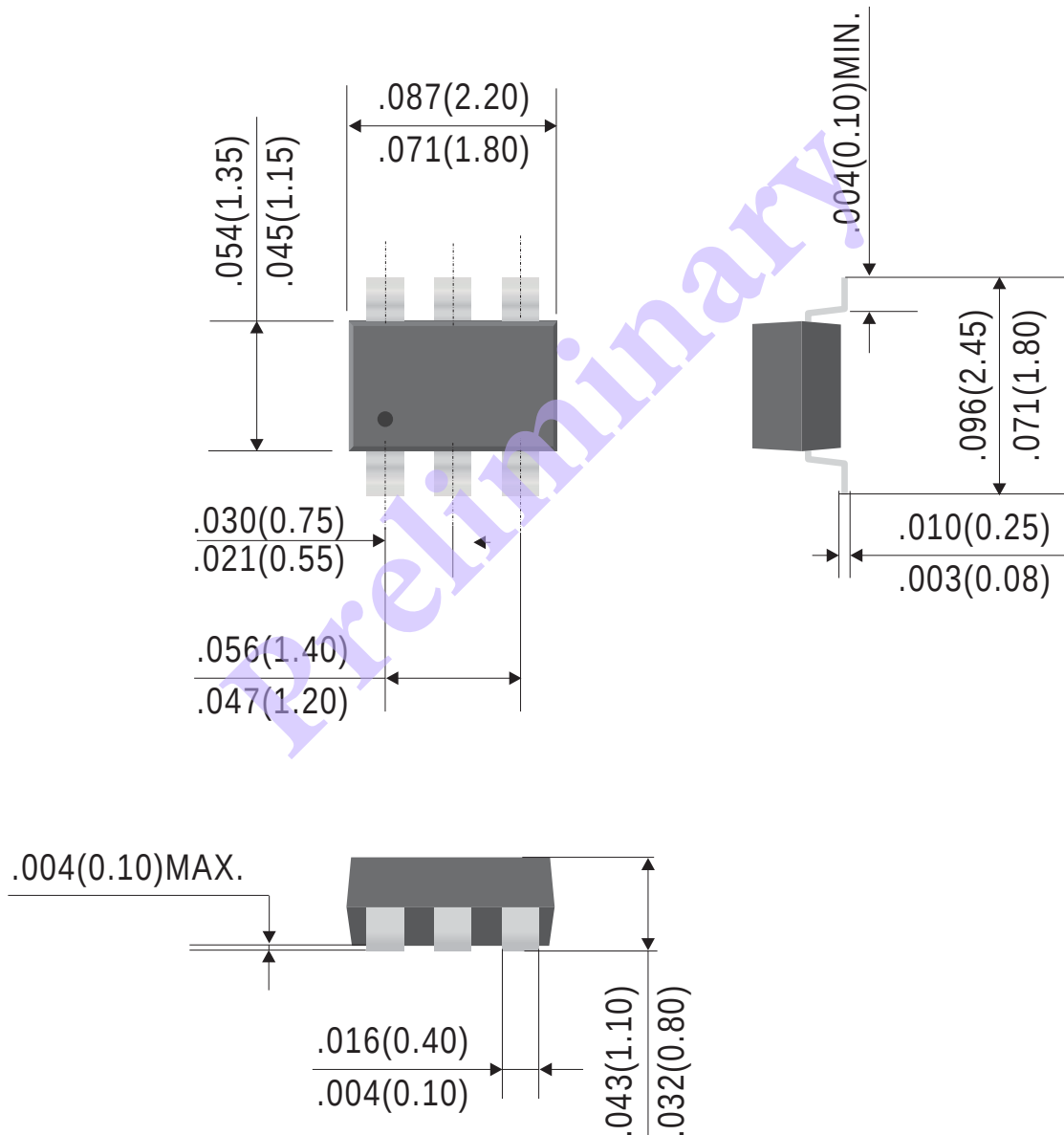


MMBD4448TW

SOT-363 Plastic-Encapsulate Diode

Outline Drawing

SOT-363



Dimensions in inches and (millimeters)

Rev.D



SOT-363 Plastic-Encapsulate Diode

Ordering Information:

Device PN	Packing
MMBD4448TW-T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

Disclaimer

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.