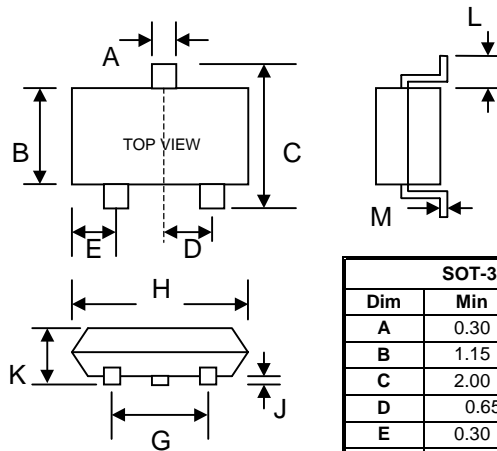


# MMBD717W / AW / CW / SW

## SURFACE MOUNT SCHOTTKY BARRIER DIODE

### Features

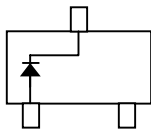
- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-O



SOT-323		
Dim	Min	Max
A	0.30	0.40
B	1.15	1.35
C	2.00	2.20
D	0.65 Nominal	
E	0.30	0.40
G	1.20	1.40
H	1.80	2.20
J	—	0.10
K	0.90	1.10
L	0.25	—
M	0.05	0.15
All Dimensions in mm		

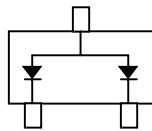
### Mechanical Data

- Case: SOT-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Weight: 0.006 grams (approx.)
- Mounting Position: Any



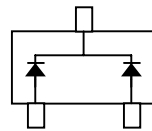
TOP VIEW

MMBD717W Marking: P70



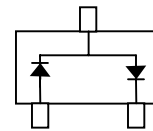
TOP VIEW

MMBD717AW Marking: P72



TOP VIEW

MMBD717CW Marking: P73



TOP VIEW

MMBD717SW Marking: P74

### Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	20	V
Forward Continuous Current (Note 1)	$I_F$	200	mA
Forward Surge Current (Note 1)	$I_{FSM}$	600	mA
Power Dissipation (Note 1)	$P_d$	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150	$^\circ\text{C}$

Note: 1. Device on fiberglass substrate.

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**Maximum Ratings and Electrical Characteristics, Single Diode** @ $T_A=25^{\circ}\text{C}$  unless otherwise specified

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Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	20	—	V	@ $I_R = 10\mu\text{A}$
Forward Voltage	$V_F$	—	370	mV	@ $I_F = 1.0\text{mA}$ , $t_p < 300\mu\text{s}$
Reverse Leakage Current	$I_R$	—	200	nA	@ $V_R = 10\text{V}$ , $t_p < 300\mu\text{s}$
Junction Capacitance	$C_j$	—	2.5	pF	$V_R = 0\text{V}$ , $f = 1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$	—	5.0	nS	$I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1.0\text{mA}$ , $R_L = 100\Omega$

## ORDERING INFORMATION

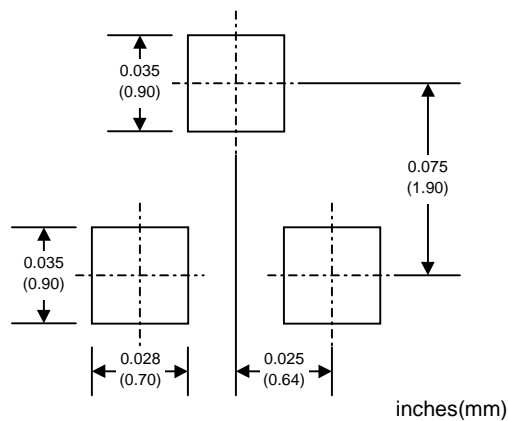
Product No.♦	Package Type	Shipping Quantity
<b>MMBD717W-T1</b>	SOT-323	3000/Tape & Reel
MMBD717W-T3	SOT-323	10000/Tape & Reel
<b>MMBD717AW-T1</b>	SOT-323	3000/Tape & Reel
MMBD717AW-T3	SOT-323	10000/Tape & Reel
<b>MMBD717CW-T1</b>	SOT-323	3000/Tape & Reel
MMBD717CW-T3	SOT-323	10000/Tape & Reel
<b>MMBD717SW-T1</b>	SOT-323	3000/Tape & Reel
MMBD717SW-T3	SOT-323	10000/Tape & Reel

Products listed in **bold** are WTE **Preferred** devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

## RECOMMENDED FOOTPRINT



Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**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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*We power your everyday.*