



## DATA SHEET

## MMBD717WS

## SURFACE MOUNT SCHOTTKY DIODES

**VOLTAGE** 20 Volts **CURRENT** 200mA

## FEATURES

- Very Low  $V_F$  : 0.32V (Typ) at  $I_F = 1\text{mA}$
- Low Capacitance : 2.5pF (Typ) at  $V_R = 1\text{V}$
- Extremely Fast Switching Speed
- Both normal and Pb free product are available :

Normal : 80~95% Sn, 5~20%% Pb

Pb free: 99% Sn above

## MECHANICAL DATA

Case: SOD-323, Plastic

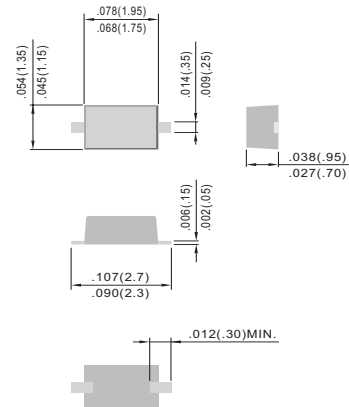
Terminals: Solderable per MIL-STD-202G, Method 208

Approx. Weight: 0.0041 gram

Marking : P70

SOD-323

Unit: inch (mm)



## MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Reverse Voltage	$V_R$	20	V
Peak Reverse Voltage	$V_{RRM}$	20	V
Continuous Forward Current	$I_F$	0.2	A
Power Dissipation <sup>(1)</sup>	$P_{TOT}$	200	mW
Thermal Resistance , Junction to Ambient <sup>(1)</sup>	$R_{\theta JA}$	625	°C/W
Junction Temperature	$T_J$	-50 to 125	°C
Storage Temperature	$T_{STG}$	-50 to 150	°C

Notes : 1. FR-5 Board = 1.0 × 0.75 × 0.062 in.

ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ , unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=10\mu\text{A}$	20	-	-	V
Reverse Current	$I_R$	$V_F=10\text{V}$	-	-	1.0	$\mu\text{A}$
Forward Voltage	$V_F$	$I_F=1.0\text{mA}$	-	-	0.37	V
Total Capacitance	$C_T$	$V_R=1\text{V}$ , $f=1.0\text{MHz}$	-	-	2.5	pF



## ELECTRICAL CHARACTERISTICS CURVES (each diode)

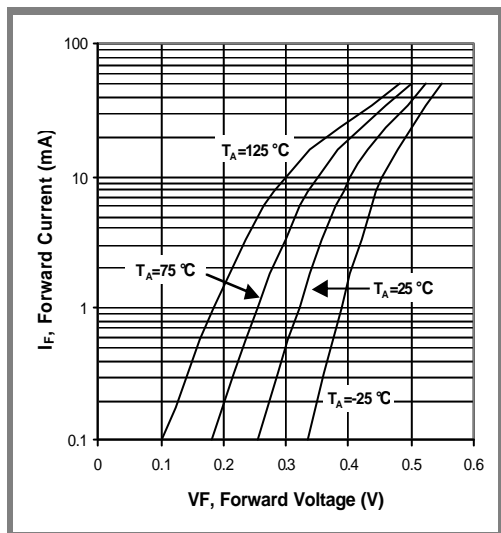


Figure 1. Typical Forward Voltage

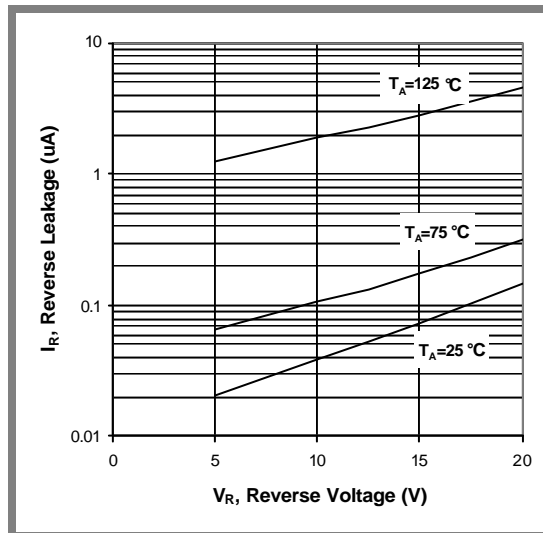


Figure 2. Typical Reverse Current

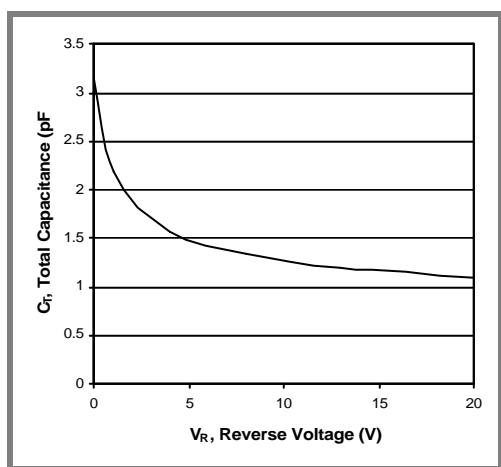


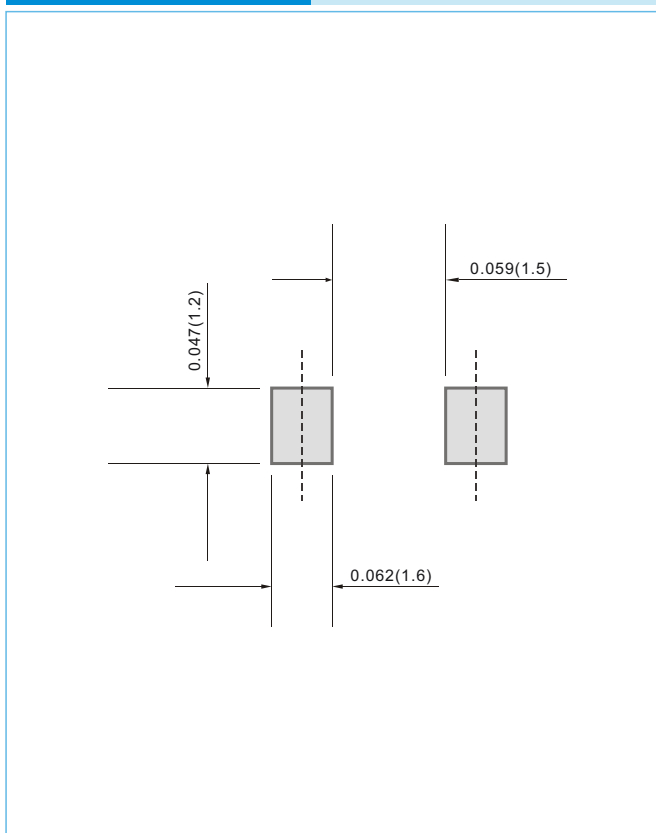
Figure 3. Typical Total Capacitance



## MOUNTING PAD LAYOUT

SOD-323

Unit: inch (mm)



## ORDER INFORMATION

- Packing information

T/R - 12K per 13" plastic Reel

T/R - 5.0K per 7" plastic Reel

## LEGAL STATEMENT

### IMPORTANT NOTICE

This information is intended to unambiguously characterize the product in order to facilitate the customer's evaluation of the device in the application. The information will help the customer's technical experts determine that the device is compatible and interchangeable with similar devices made by other vendors. The information in this data sheet is believed to be reliable and accurate. The specifications and information herein are subject to change without notice. New products and improvements in products and product characterization are constantly in process. Therefore, the factory should be consulted for the most recent information and for any special characteristics not described or specified.

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