



DATA SHEET

MMBD6050WS

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 80 Volts **POWER** 200mWatts

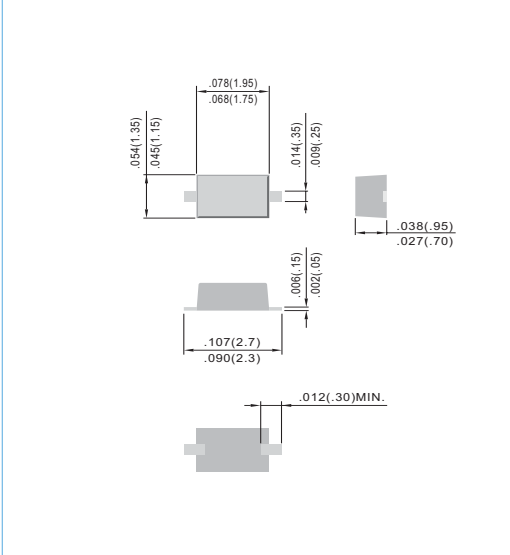
SOD-323 Unit: inch (mm)

FEATURES

- Very fast reverse recovery (trr < 2.0 ns typical)
- Low capacitance (< 2.5pF @ 0V)
- Surface mount package ideally suited for automatic insertion.
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: SOD-323 plastic
 Terminals : Solderable per MIL-STD-750,Method 2026
 Approx weight : 0.008 gram
 Marking : T2



ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Reverse Voltage	V _R	80	V
Peak Reverse Voltage	V _{RRM}	80	V
Continuous Forward Current	I _F	0.2	A
Non-repetitive Peak Forward Surge Current at t=1.0 μs	I _{FSM}	2.0	A

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNITS
Power Dissipation ⁽¹⁾	P _{TOT}	200	mW
Thermal Resistance, Junction to Ambient ⁽¹⁾	R _{θJA}	625	°C/W
Junction Temperature	T _J	-55 to 150	°C
Storage Temperature	T _{STG}	-55 to 150	°C

NOTE:

1. FR-5 Board=1.0 x 0.75 x 0.062 in.



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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu\text{A}$	80	-	-	V
Reverse Current	I_R	$V_R=50\text{V}$	-	-	100	nA
Forward Voltage	V_F	$I_F=1\text{mA}$ $I_F=100\text{mA}$	0.55 0.85	-	0.7 1.1	V
Total Capacitance	C_T	$V_R=0\text{V}$, $f=1\text{MHz}$	-	-	2.5	pF
Reverse Recovery Time (Figure 1)	t_{rr}	$I_F=I_R=10\text{mA}$, $R_L=100\ \Omega$	-	-	4.0	ns



ELECTRICAL CHARACTERISTIC CURVES

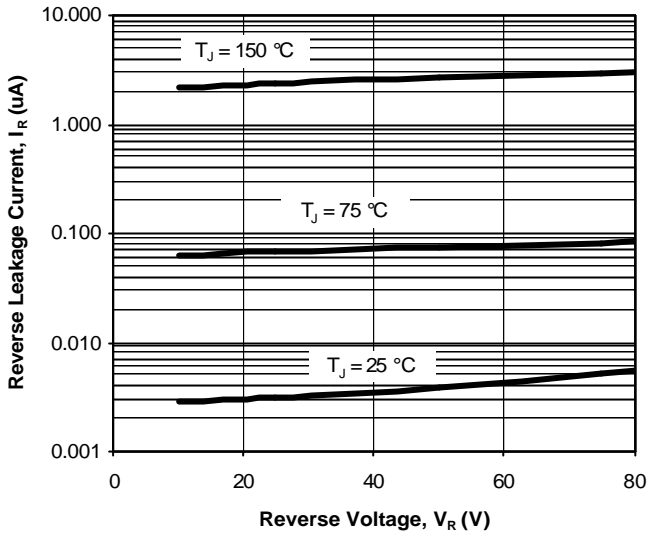


Fig. 2. Reverse Current vs. Reverse Voltage

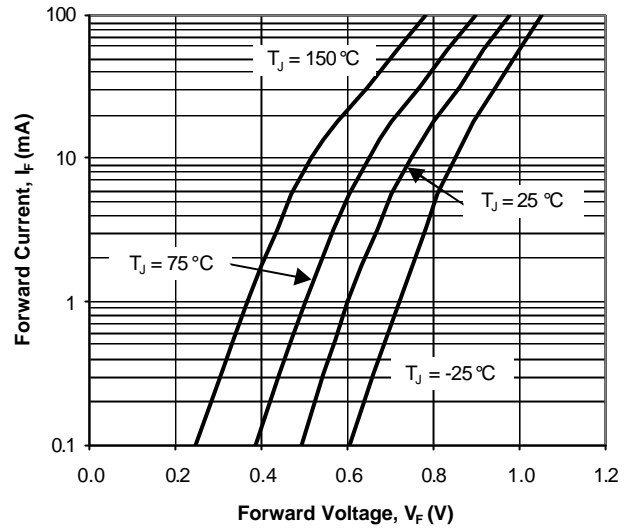


Fig. 3. Forward Current vs. Forward Voltage

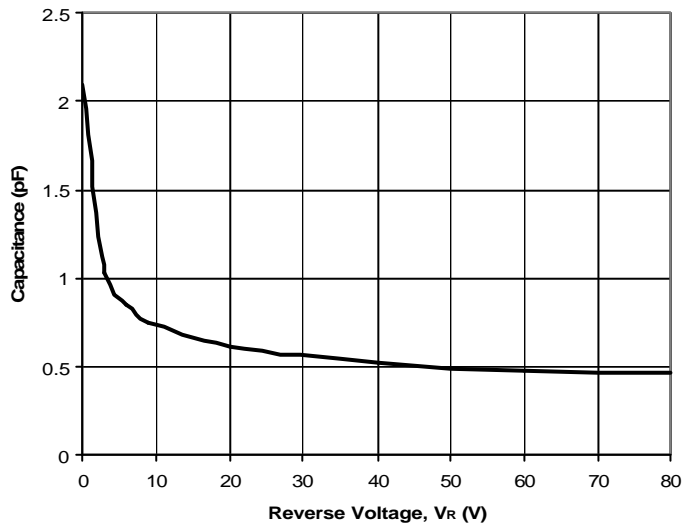
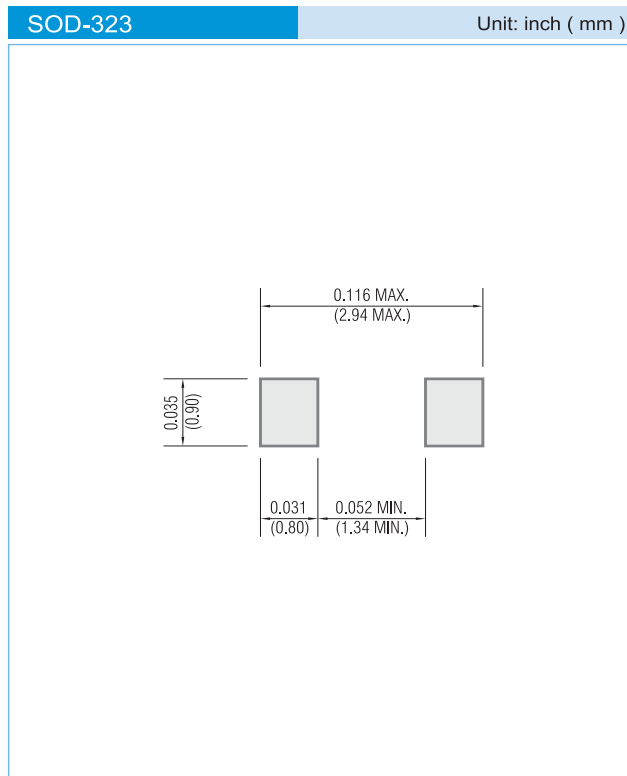


Fig. 4. Capacitance vs. Reverse Voltage



MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 5K 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.

Copyright Pan Jit International Inc. 2003

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner.

The information presented in this document does not form part of any quotation or contract. The information presented is believed to be accurate and reliable, and may change without notice in advance. No liability will be accepted by the publisher for any consequence of use. Publication thereof does not convey nor imply any license under patent or other industrial or intellectual property rights.