



DATA SHEET

MMBD717/A/C/S

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 20 Volts **CURRENT** 0.2 Amperes

SOT-23 Unit: inch (mm)

FEATURES

- Very Low V_F : 0.32V (Typ) at $I_F = 1\text{mA}$
- Low Capacitance: 2.5 pF (Max) 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: 98.5% Sn above

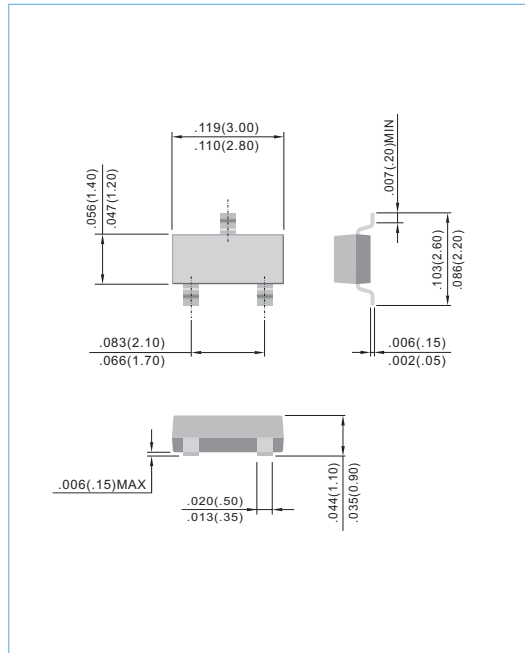
MECHANICAL DATA

Case: SOT-23, Plastic

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

Approx. Weight: 0.008 gram

Marking: P40,P72,P73,P74



ABSOLUTE RATINGS

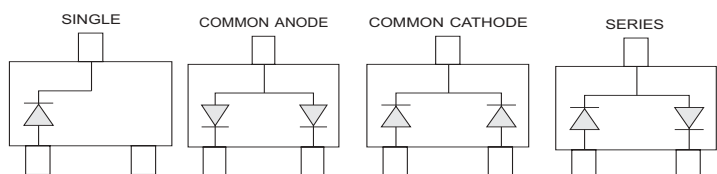
PARAMETER	Symbol	Value	Units
Maximum Reverse Voltage	V_R	20	V
Peak Reverse Voltage	V_{RRM}	20	V
Maximum Forward Current	I_F	0.2	A

THERMAL CHARACTERISTICS

PARAMETER	Symbol	MMBD717	MMBD717A	MMBD717C	MMBD717S	Units
Power Dissipation (Note 1)	P_{TOT}	200				mW
Thermal Resistance , Junction to Ambient	$R_{\theta JA}$	556				$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	-55 to 150				$^{\circ}\text{C}$
Storage Temperature at Temp=25 $^{\circ}\text{C}$	T_{STG}	-55 to 150				$^{\circ}\text{C}$
Circuit Figure		SINGLE	COMMON ANODE	COMMON CATHODE	SERIES	

Note:

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





ELECTRICAL CHARACTERISTICS (each diode) ($T_j = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=10\ \mu\text{A}$	20	--	--	V
Reverse Leakage Current	I_R	$V_R=10\ \text{V}$	--	--	1.0	μA
Forward Voltage	V_F	$I_F=1.0\text{mA}$	--	--	0.37	V
Maximum Junction Capacitance	C_J	$V_R=1\text{V}, f=1.0\text{MHz}$	--	--	2.5	pF

ELECTRICAL CHARACTERISTICS CURVE

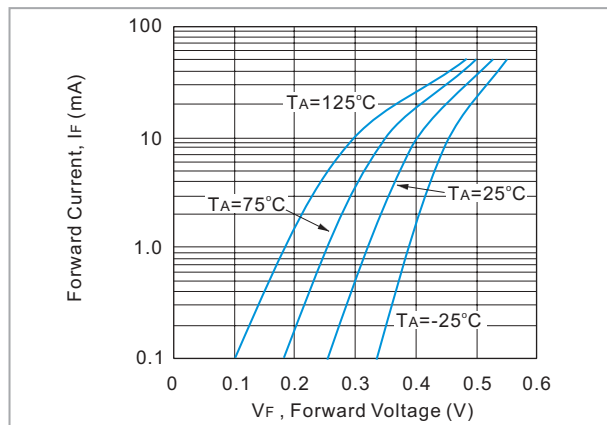


Fig. 1. Typical Forward Voltage

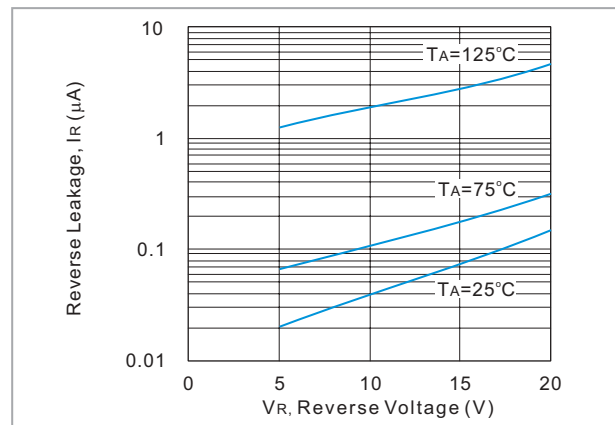


Fig. 2. Typical Reverse Leakage

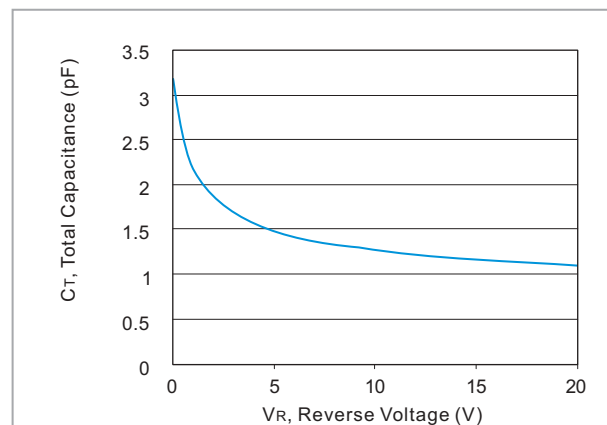


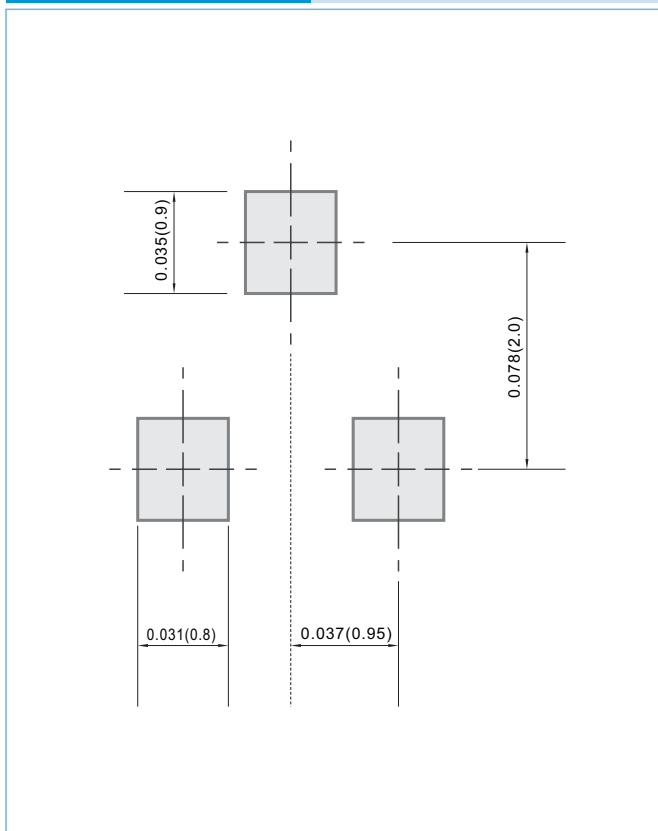
Fig. 3. Typical Total Capacitance



MOUNTING PAD LAYOUT

SOT-23

Unit: inch (mm)



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3.0K 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.

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.