

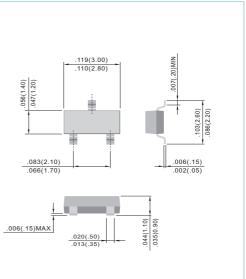
# DATA SHEET

## MMBD452

### SURFACE MOUNT SCHOTTKY DIODE

# VOLTAGE30 VoltsPOWER200 mWattsSOT- 23FEATURES• Low Capacitance: 1.5 pF (Max) at $V_R = 15V$ • Very Low $V_F$ : 0.36V (Typ) at $I_F = 1mA$ • Extremely Fast Switching Speed• Isolated, Schottky Pairs in Small Surface Mount PackageMECHANICAL DATACase: SOT-23 plastic

Terminals: Solderable per MIL-STD-202, Method 208 Approx Weight: 0.008 gram Marking: 452



### **ABSOLUTE RATINGS**

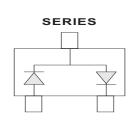
PARAMETER	SYMBOL	Value	UNIT
Maximum Reverse Voltage	V <sub>R</sub>	30	V
Peak Reverse Voltage	VRRM	30	V
Maximum Forward Current	l <sub>F</sub>	0.2	А

### THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	Value	UNIT
Power Dissipation (Note 1)	Ptot	200	mW
Thermal Resistance , Junction to Ambient (Note 1)	R0J A	556	°C/W
Junction Temperature	Tj	-55 to 125	°C
Storage Temperature	Tstg	-55 to 150	°C

Note

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



Unit: inch (mm)



PARAMETER	SYMBOL	Test Condition	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage	V(BR)	IR=10 uA	30			V
Reverse Leakage Current	IR	VR=25V			0.2	uA
Forward Voltage	VF	IF=1.0mA			0.45	V
Forward Voltage	VF	IF=10mA			0.6	V
Total Capacitance	Ст	VR=15V, f=1.0MHz			1.5	pF

### **RATING AND CHARACTERISTIC CURVES**

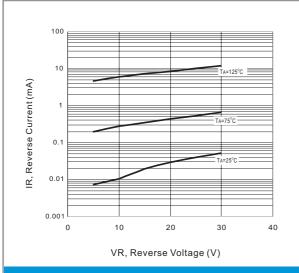


Fig.1 TYPICAL REVERSE CHARACTERISTICS

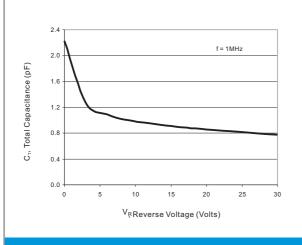


Fig.3 TYPICAL TOTAL CAPACITANCE

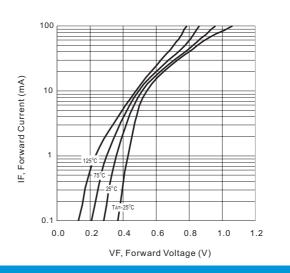


Fig.2-TYPICAL FORWARD CHARACTERISTICS



# **MOUNTING PAD LAYOUT** SOT-23 Unit: inch (mm) 0.035 MIN (0.9 MIN) 0.078 MAX (2.0 MAX) 1 0.031 MIN (0.8 MIN) 0.037 MAX (0.95 MAX)



### **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.