PANJIT SEMI CONDUCTOR

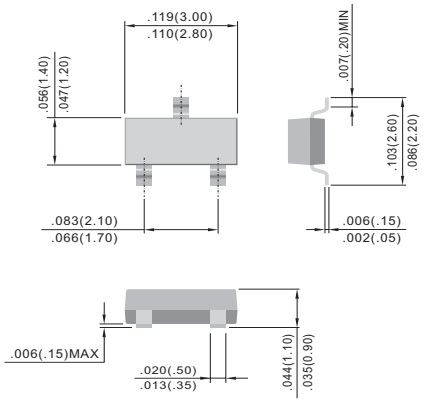
DATA SHEET

MMBD452

SURFACE MOUNT SCHOTTKY DIODE

VOLTAGE 30 Volts **POWER** 200 mWatts

SOT- 23 Unit: inch (mm)



FEATURES

- 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 Package

MECHANICAL DATA

Case: SOT-23 plastic
Terminals: Solderable per MIL-STD-202, Method 208
Approx Weight: 0.008 gram
Marking: 452

ABSOLUTE RATINGS

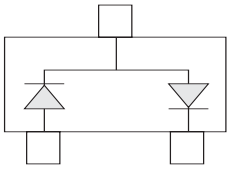
PARAMETER	SYMBOL	Value	UNIT
Maximum Reverse Voltage	V_R	30	V
Peak Reverse Voltage	V^{RRM}	30	V
Maximum Forward Current	I_F	0.2	A

THERMAL CHARACTERISTICS

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

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

SERIES



ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

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	C_T	VR=15V, f=1.0MHz			1.5	pF

RATING AND CHARACTERISTIC CURVES

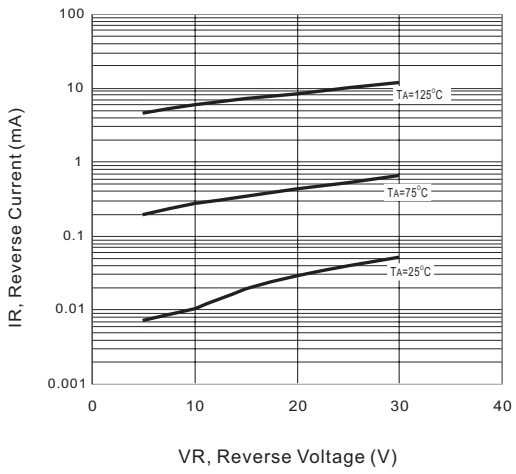


Fig.1 TYPICAL REVERSE CHARACTERISTICS

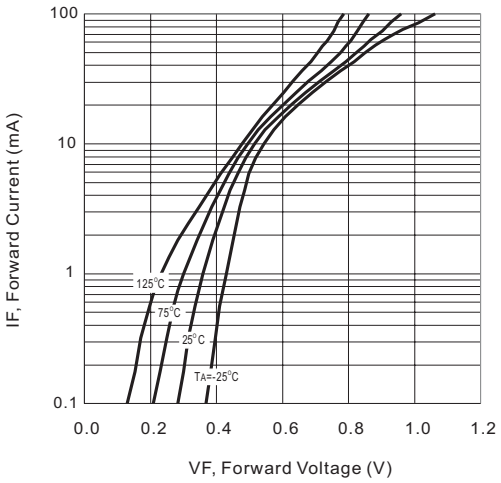


Fig.2-TYPICAL FORWARD CHARACTERISTICS

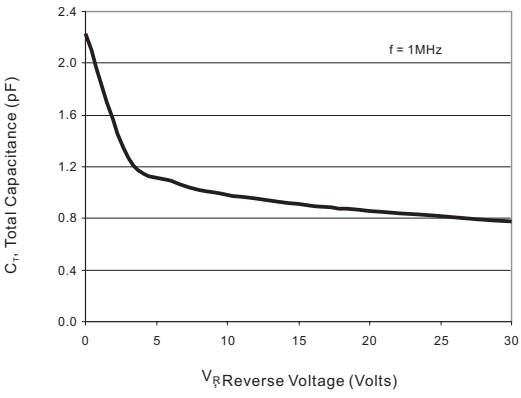
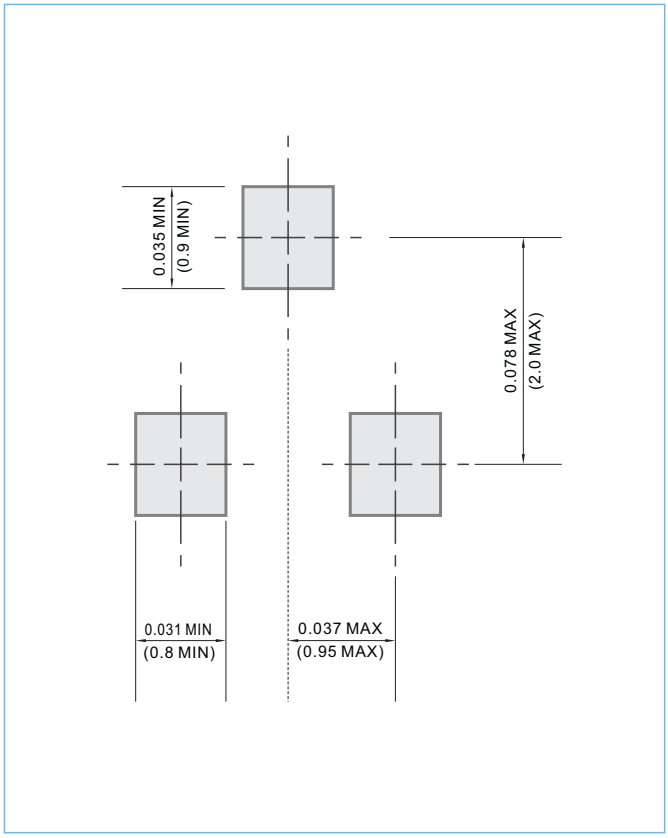


Fig.3 TYPICAL TOTAL CAPACITANCE

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.