



DATA SHEET

MMBD770W

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 70 Volts **POWER** 200mA

FEATURES

- Extremely low minority carrier lifetime
- Low capacitance (0.4pF @ 20V typical)
- Low reverse leakage (30nA @ 35V typical)
- Surface mount package ideally suited for automatic insertion
- Both normal and Pb free product are available :

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

Pb free: 99% Sn above

MECHANICAL DATA

Case: SOT-323, Plastic

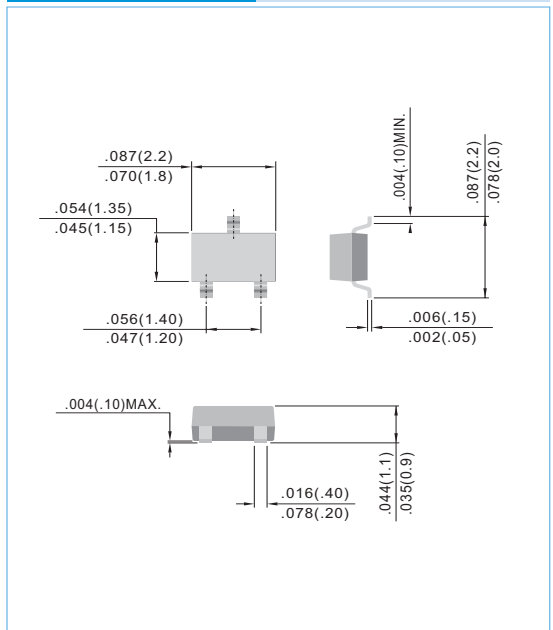
Terminals: Solderable per MIL-STD-202G, Method 208

Approx. Weight: 0.0048 gram

Marking : 770

SOT-323

Unit: inch (mm)



MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Reverse Voltage	V_R	70	V
Peak Reverse Voltage	V_{RRM}	70	V
Continuous Forward Current	I_F	0.25	A
Power Dissipation ⁽¹⁾	P_{TOT}	180	mW
Thermal Resistance , Junction to Ambient ⁽¹⁾	$R_{\theta JA}$	556	°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 x 0.75 x 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	$V_{(BR)}$	$I_R=10\mu\text{A}$	70	-	-	V
Reverse Current	I_R	$V_F=35\text{V}$	-	-	0.2	μA
Forward Voltage	V_F	$I_F=1\text{mA}$ $I_F=10\text{mA}$	-	-	0.5 1.0	V
Total Capacitance	C_T	$V_R=20\text{V}, f=1\text{MHz}$	-	-	1.0	pF



CHARACTERISTIC CURVES

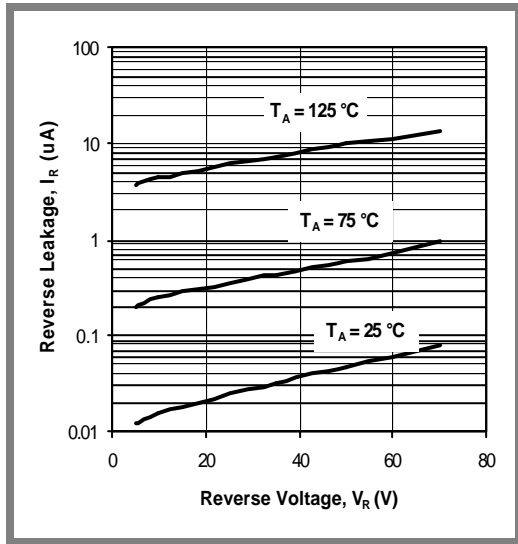


Fig. 1. Typical Reverse Leakage

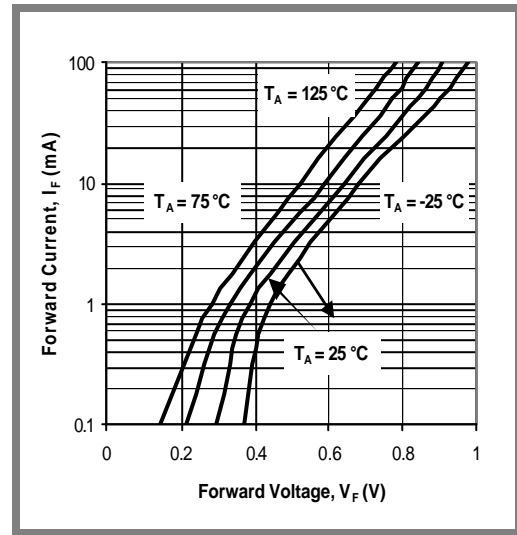


Fig. 2. Typical Forward Voltage

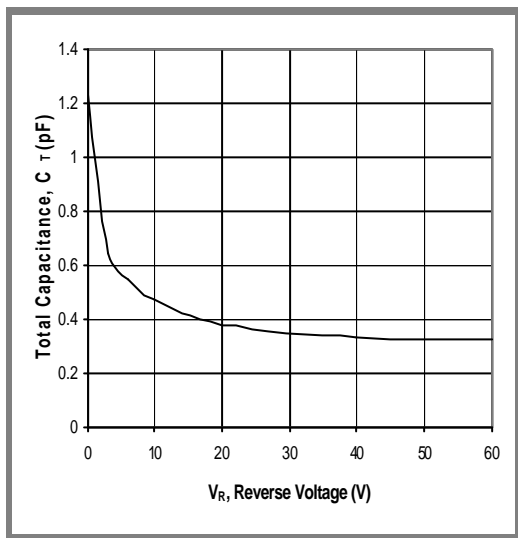
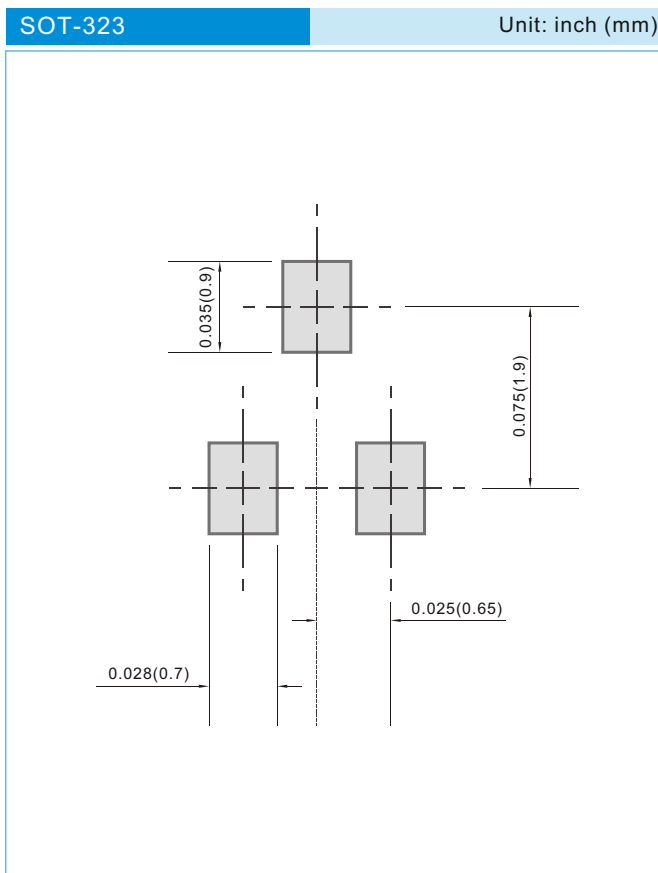


Fig. 3. Typical Total Capacitance



MOUNTING PAD LAYOUT



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.

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