

# DATA SHEET

## MMBD770W

### SURFACE MOUNT SCHOTTKY DIODES

**VOLTAGE** 70 Volts **CURRENT** 250mA

#### 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
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### MECHANICAL DATA

Case: SOT-323, Plastic

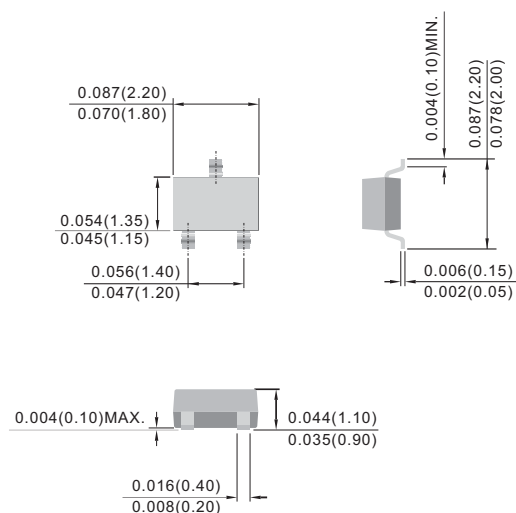
Terminals: Solder plated,solderable per MIL-STD-750,Method2026

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 <sup>(1)</sup>	$P_{TOT}$	180	mW
Thermal Resistance , Junction to Ambient <sup>(1)</sup>	$R_{\theta JA}$	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 × 0.75 × 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	$\mu\text{A}$
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

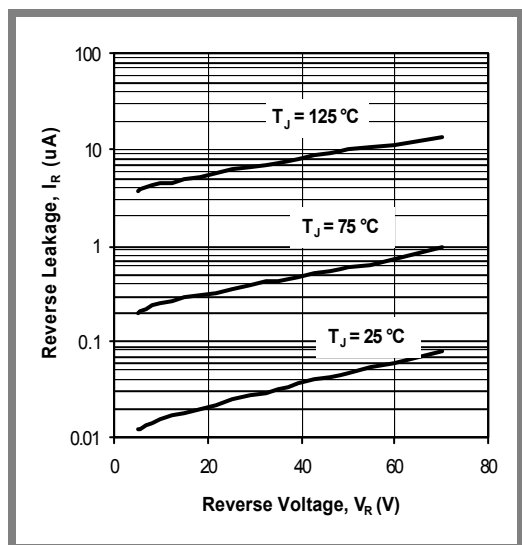


Fig. 1. Typical Reverse Leakage

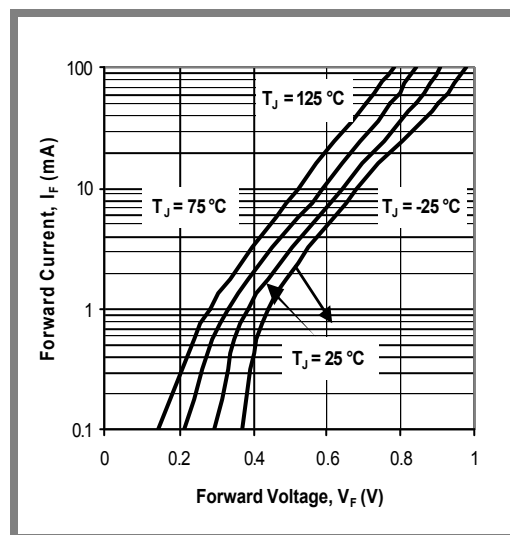


Fig. 2. Typical Forward Voltage

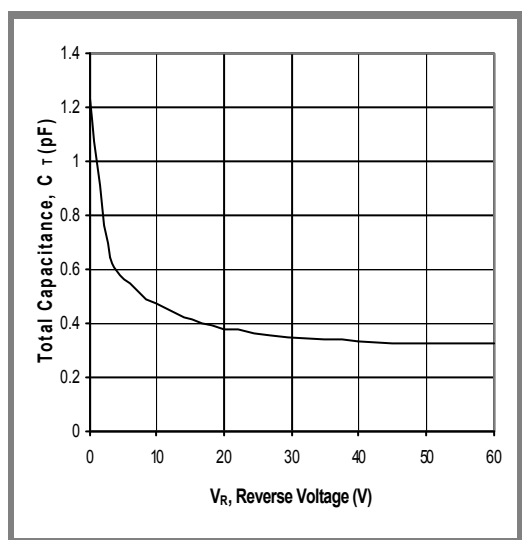
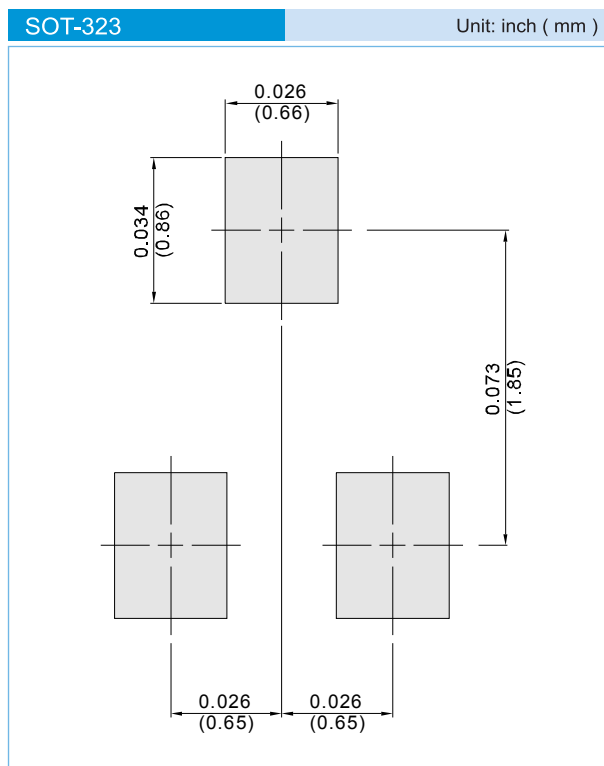


Fig. 3. Typical Total Capacitance

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel

# MMBD770W

## Part No\_packing code\_Version

MMBD770W\_R1\_00001

MMBD770W\_R2\_00001

For example :

**RB500V-40\_R2\_00001**

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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