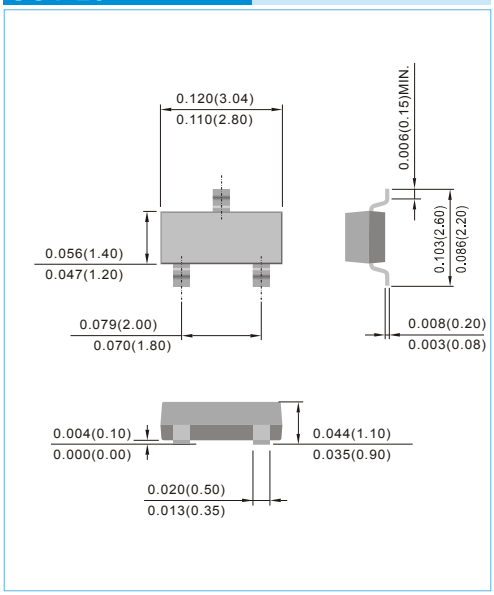
MMBD7000

SURFACE MOUNT SWITCHINGDIODE

VOLTAGE 100 Volt **POWER** 225 mWatt

SOT-23 Unit : inch(mm)



FEATURES

- Very fast reverse recovery (Trr < 2 ns typical)
- Isolated, series-connected diode pair
- Surface mount package ideally suited for automatic insertion
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

Case: SOT-23, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.0003 ounces, 0.0084 grams

Marking: T3

ABSOLUTE RATINGS

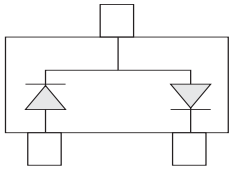
Parameter	Symbol	Value	Units
Maximum Reverse Voltage	V_R	100	V
Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	0.2	A
Non-repetitive Peak Forward Surge Current at t=1μs	I_{FSM}	4	A

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation (Note 1)	P_{TOT}	225	mW
Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	556	°C/W
Junction Temperature	T_J	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

Note 1. FR-4 Boand = 70 x 60 x 1mm.

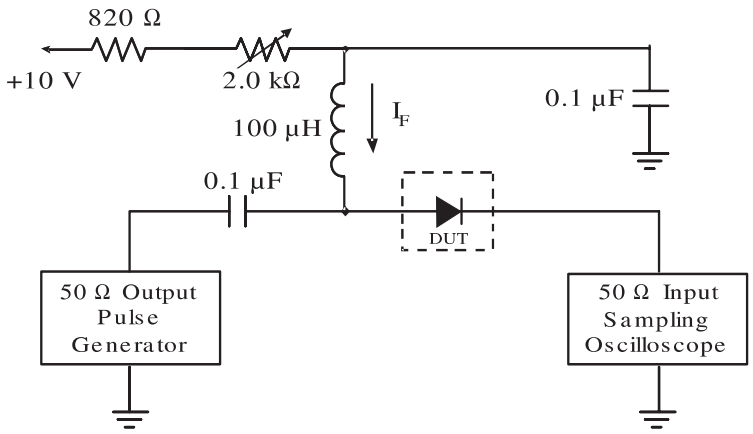
SERIES



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ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	I_R=100μA	100	--	--	V
Reverse Current	I_R	V_R=50V V_R=100V V_R=50V,T_J=125°C	--	--	1 3 100	μA
Forward Voltage	V_F	I_F=1mA I_F=10mA I_F=100mA	--	--	0.7 0.82 1.1	V
Total Capacitance	C_J	V_R=0V, f=1MHz	--	--	2	pF
Reverse Recovery Time (See Figure 1)	T_{RR}	I_F=10mA,I_R=10mA R_L=100Ω	--	--	4	ns



Notes: 1. A 2.0kΩ variable resistor adjusted for a forward current (I_F) to 10mA

2. Input pulse is adjusted to $I_{R(peak)}$ is equal to 10mA

Figure 1. REVERSE RECOVERY TIME EQUIVALENT TEST CIRCUIT

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ELECTRICAL CHARACTERISTICS CURVE

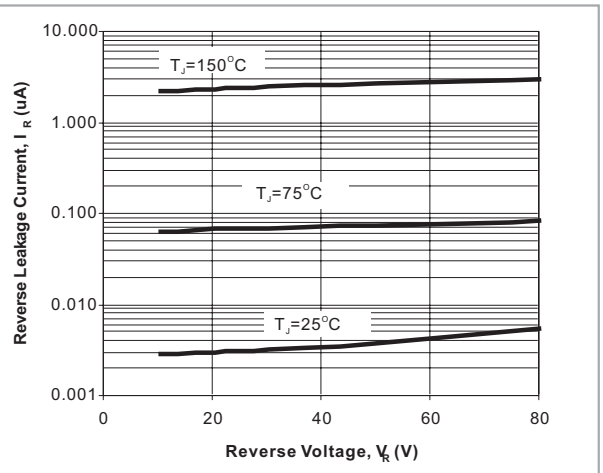


Fig. 2. Reverse Current vs. Reverse Voltage

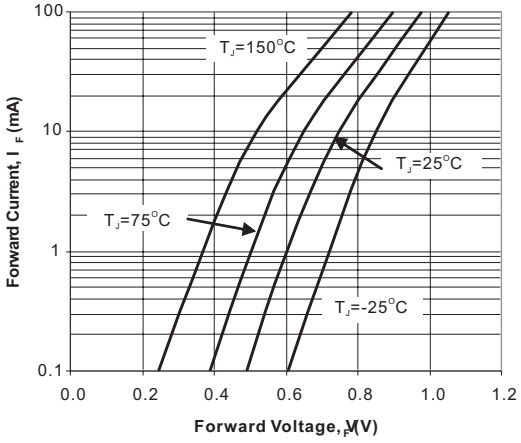


Fig. 3. Forward Current vs. Forward

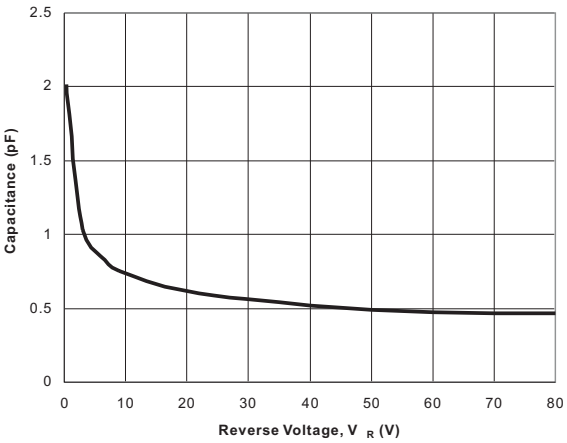
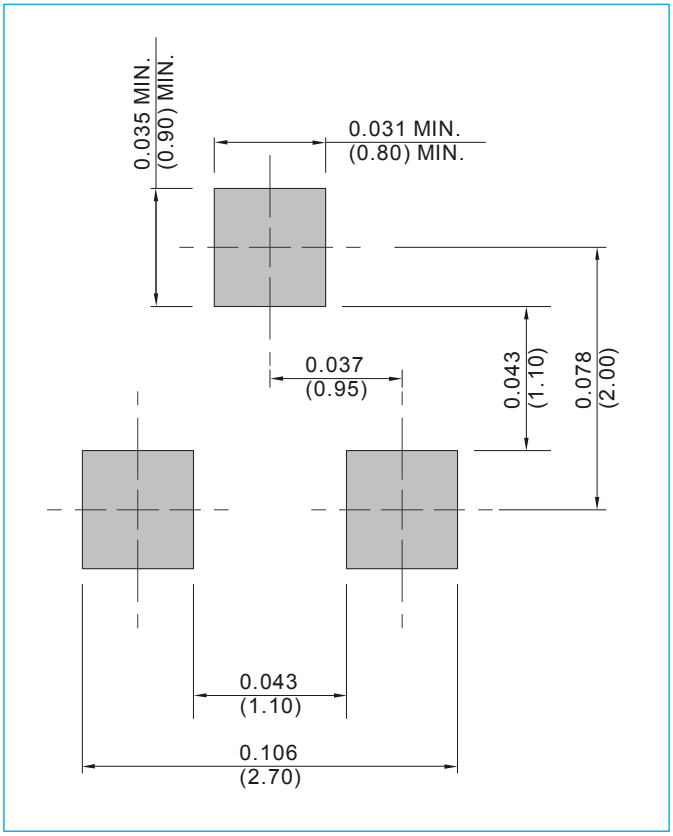


Fig. 4. Capacitance vs. Reverse Voltage

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MOUNTING PAD LAYOUT

SOT-23 Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 12K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

MMBD7000

Part No_packing code_Version

MMBD7000_R1_00001

MMBD7000_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 XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

MMBD7000

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