



DATA SHEET

MMBD914WS-AU

SURFACE MOUNT SWITCHING DIODES

VOLTAGE	100Volt	POWER	200mW
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FEATURES

- Very fast reverse recovery ($T_{rr} < 2.0$ ns typical)
- Low capacitance (2pF @ 0V typical)
- 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)
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified

MECHANICAL DATA

- Case: SOD-323 plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx weight: 0.00014 ounces, 0.0041 grams
- Marking: T1

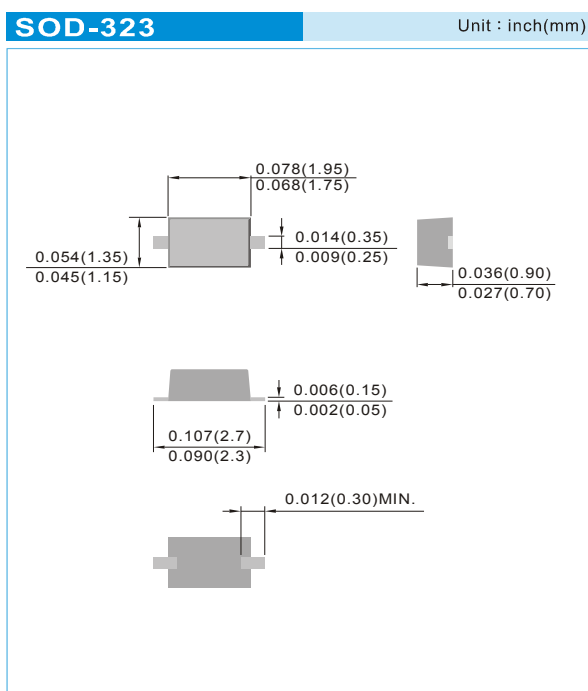
ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
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 $t=1.0$ us	I_{FSM}	4.0	A

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation ⁽¹⁾	P_{TOT}	200	mW
Thermal Resistance , Junction to Ambient ⁽¹⁾	R_{JA}	625	/W
Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	

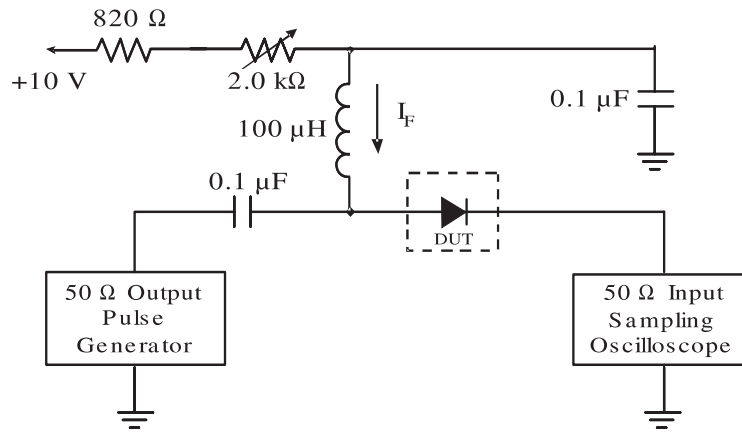
Note 1. FR-4 Board = 70 x 60 x 1mm.





ELECTRICAL CHARACTERISTICS (T_J=25°C, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage	V _(BR)	I _R =100uA	100	-	-	V
Reverse Current	I _R	V _R =20V V _R =75V	-	-	0.025 5.0	uA
Forward Voltage	V _F	I _F =10mA	-	-	1.0	V
Total Capacitance	C _T	V _R =0V, f=1MHz	-	-	4.0	pF
Reverse Recovery Time (Figure 1)	t _{rr}	I _F =I _R =10mA, R _L =100Ω	-	-	4.0	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



ELECTRICAL CHARACTERISTIC CURVES

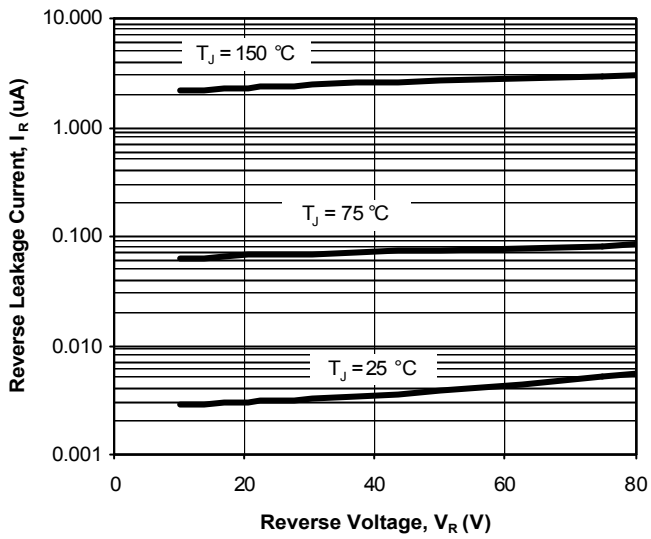


Fig. 2. Reverse Current vs. Reverse Voltage

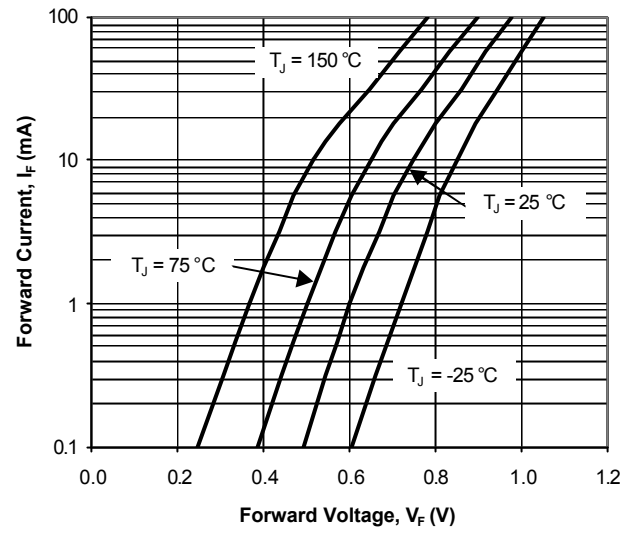


Fig. 3. Forward Current vs. Forward Voltage

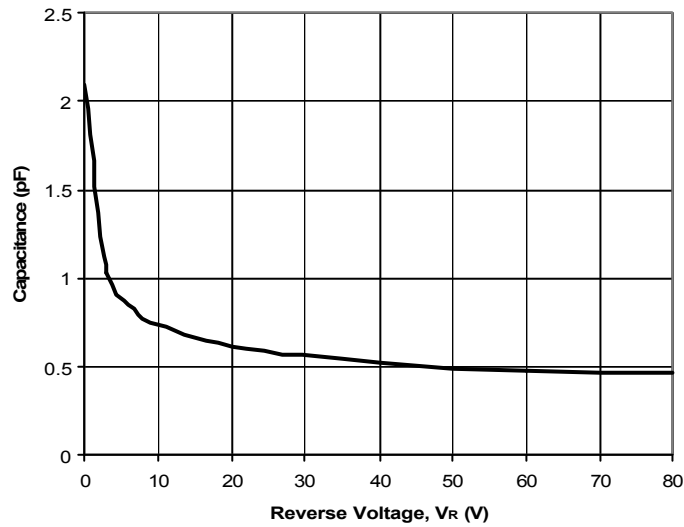
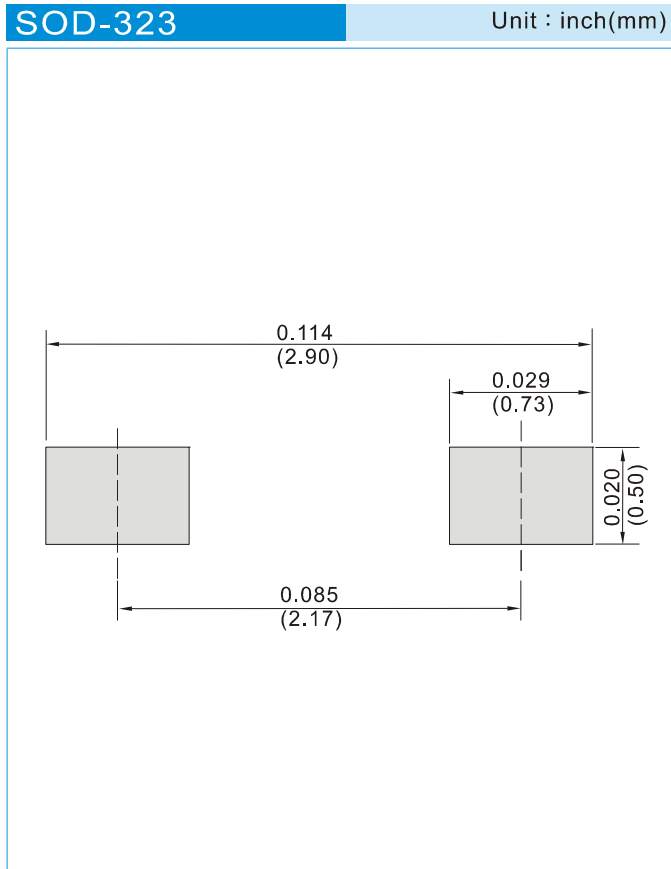


Fig. 4. Capacitance vs. Reverse Voltage



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 12K per 13" plastic Reel
T/R - 5K per 7" plastic Reel



MMBD914WS-AU

Part No_packing code_Version

MMBD914WS-AU_R1_000A1

MMBD914WS-AU_R2_000A1

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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			



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