

MMBD914TS

SURFACE MOUNT SWITCHING DIODES

Voltage

100 V

Power

200 mW

SOD-523

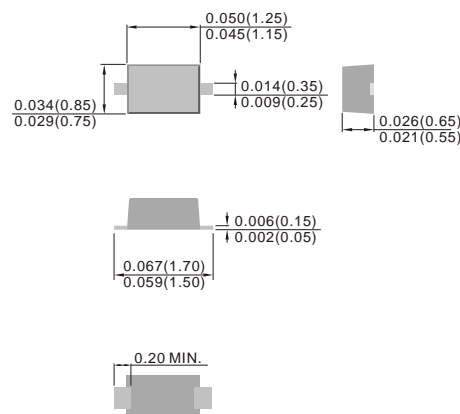
Unit : inch(mm)

Features

- Very fast reverse recovery ($T_{rr} < 2\text{ns}$ 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)

Mechanical Data

- Case: SOD-523 plastic case
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00005 ounces, 0.0014 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 $t=1\mu\text{s}$	I_{FSM}	4	A

THERMAL CHARACTERISTICS

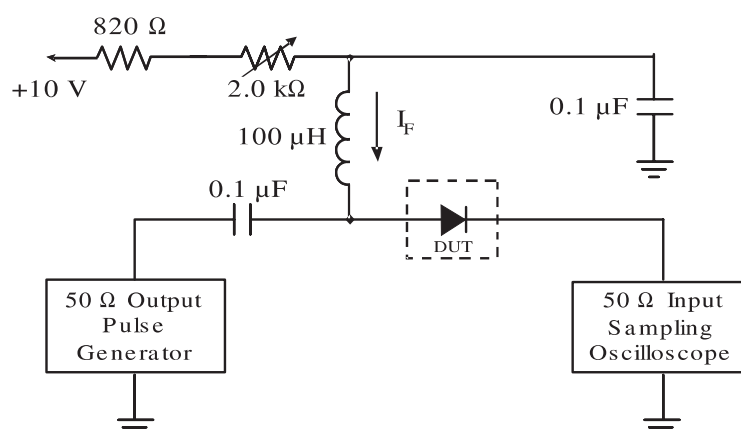
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation (Note 1)	P_{TOT}	200	mW
Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	635	$^{\circ}\text{C/W}$
Junction Temperature Range	T_J	-55 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

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

MMBD914TS

ELECTRICAL CHARACTERISTICS ($T_J=25^\circ\text{C}$, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP	MAX.	UNIT
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	100	-	-	V
Reverse Current	I_R	$V_R=20\text{V}$ $V_R=75\text{V}$	-	-	0.025 5	μA
Forward Voltage	V_F	$I_F=10\text{mA}$	-	-	1	V
Total Capacitance	C_J	$V_R=0\text{V}$ $f=1\text{MHz}$	-	-	4	pF
Reverse Recovery Time (Figure 1)	T_{RR}	$I_F = I_R=10\text{mA}$ $R_L=100\Omega$	-	-	4	ns



- Notes:
1. A $2.0\text{k}\Omega$ variable resistor adjusted for a forward current (I_F) to 10mA
 2. Input pulse is adjusted to $I_{R(\text{peak})}$ is equal to 10mA

Figure 1. REVERSE RECOVERY TIME EQUIVALENT TEST CIRCUIT

MMBD914TS

ELECTRICAL CHARACTERISTICS CURVE

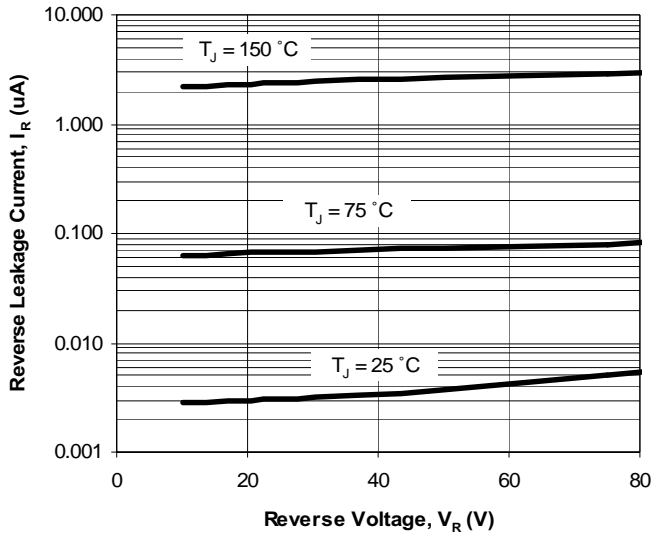


Fig. 2. Reverse Current vs. Reverse Voltage

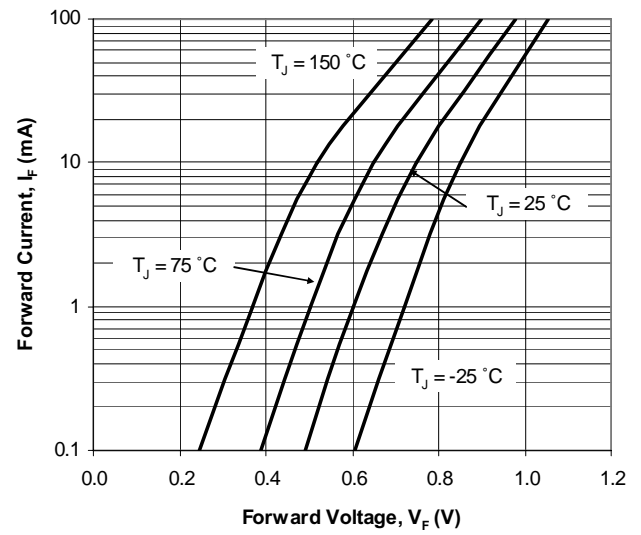


Fig. 3. Forward Current vs. Forward Voltage

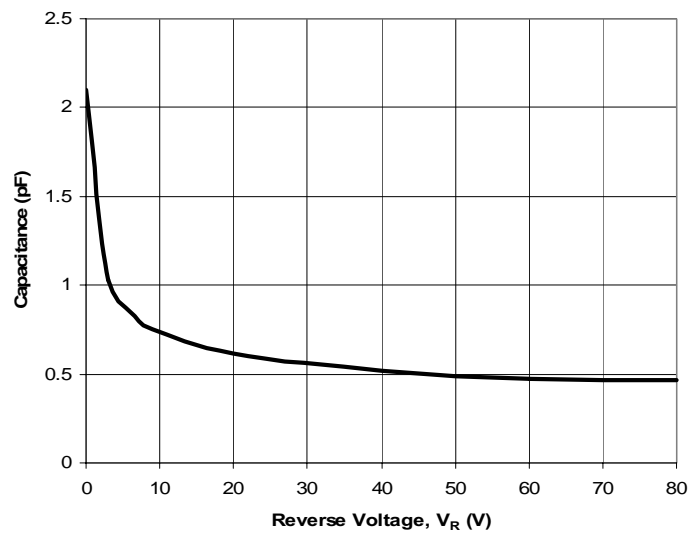


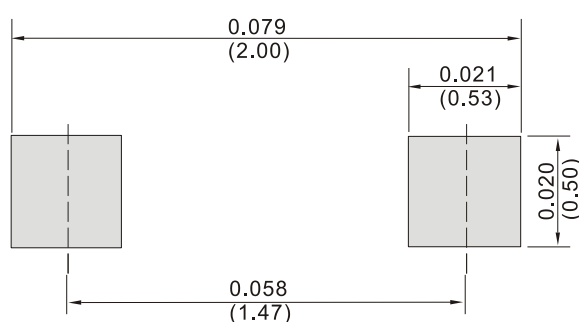
Fig. 4. Capacitance vs. Reverse Voltage

MMBD914TS

MOUNTING PAD LAYOUT

SOD-523

Unit : inch(mm)



ORDER INFORMATION

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



MMBD914TS

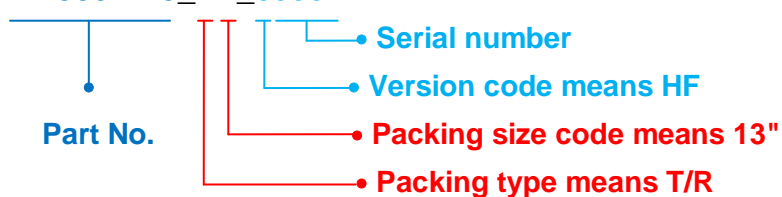
Part No_packing code_Version

MMBD914TS_R1_00001

MMBD914TS_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXXX		
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			



MMBD914TS

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panjit:

[MMBD914TS_R1_00001](#) [MMBD914TS_R1_10001](#) [MMBD914TS_R2_00001](#) [MMBD914TS_R2_10001](#)