



## 200mA Surface Mount Switching Diode - 100V SOD-323 Package

# MMDL914

### FETURE

- **Pb-Free package is available**  
RoHS product for packing code suffix "G"  
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**

### ORDERING INFORMATION

Device	Package	Shipping
MMDL914	SOD-323	3000/Tape&Reel

### MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Reverse Voltage	$V_R$	100	Vdc
Forward Current	$I_F$	200	mAdc
Peak Forward Surge Current	$I_{FM(surge)}$	500	mAdc

### THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board,* $T_A = 25^\circ\text{C}$	$P_D$	200	mW
Derate above $25^\circ\text{C}$		1.57	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	$^\circ\text{C}/\text{W}$
<b>Operating/Junction and Storage Temperature</b>	$T_J, T_{stg}$	150	$^\circ\text{C}$

\*\*FR-4 Minimum Pad

### DEVICE MARKING

MMDL914 = 5D

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

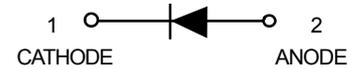
Characteristic	Symbol	Min	Max	Unit
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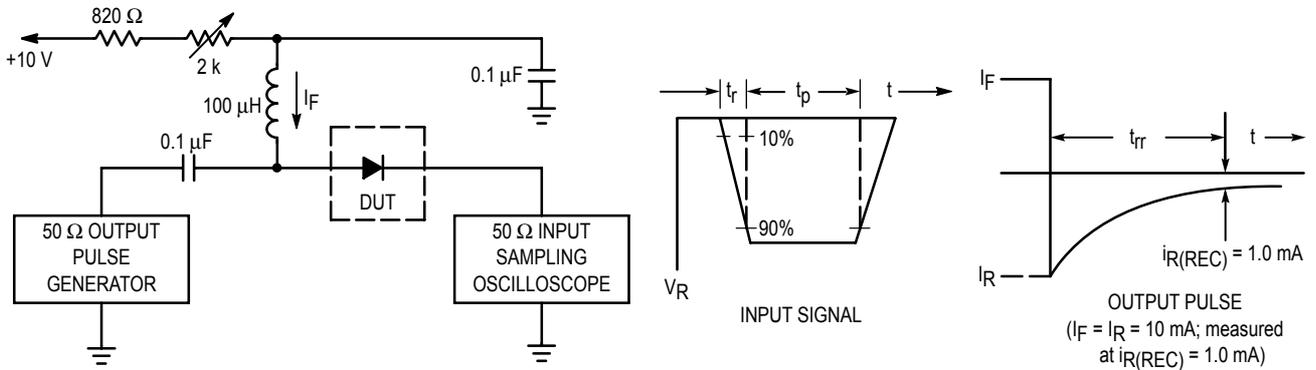
### OFF CHARACTERISTICS

Reverse Breakdown Voltage ( $I_R = 100 \mu\text{Adc}$ )	$V_{(BR)}$	100	—	Vdc
Reverse Voltage Leakage Current ( $V_R = 20\text{Vdc}$ ) ( $V_R = 75\text{Vdc}$ )	$I_R$	—	25 5.0	nAdc $\mu\text{Adc}$
Diode Voltage ( $V_R = 0, f = 1.0\text{MHz}$ )	$C_T$	—	4.0	pF
Forward Voltage ( $I_F = 10 \text{mAdc}$ )	$V_F$	—	1.0	Vdc
Reverse Recovery Time ( $I_F = I_R = 10 \text{mAdc}$ ) (Figure 1)	$t_{rr}$	—	4.0	ns



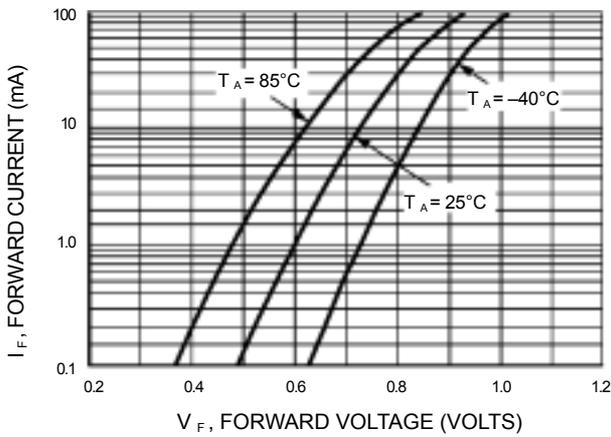
Polarity: Color band denotes cathode end



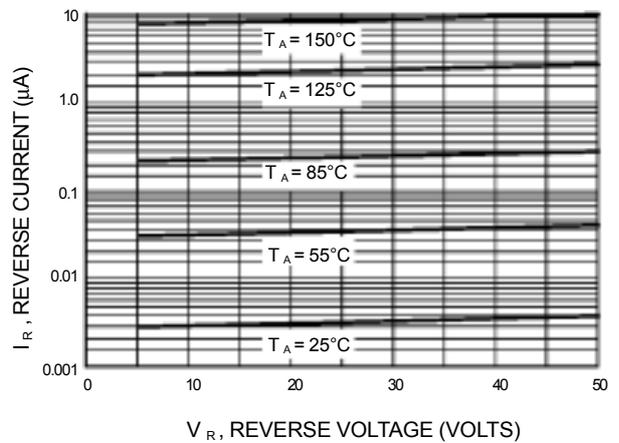


- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current ( $I_F$ ) of 10mA.  
 2. Input pulse is adjusted so  $I_{R(peak)}$  is equal to 10mA.  
 3.  $t_p \gg t_{rr}$

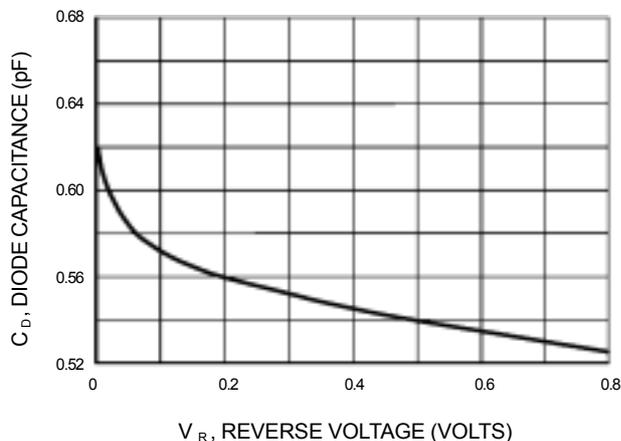
**Figure 1. Recovery Time Equivalent Test Circuit**



**Figure 2. Forward Voltage**



**Figure 3. Leakage Current**



**Figure 4. Capacitance**



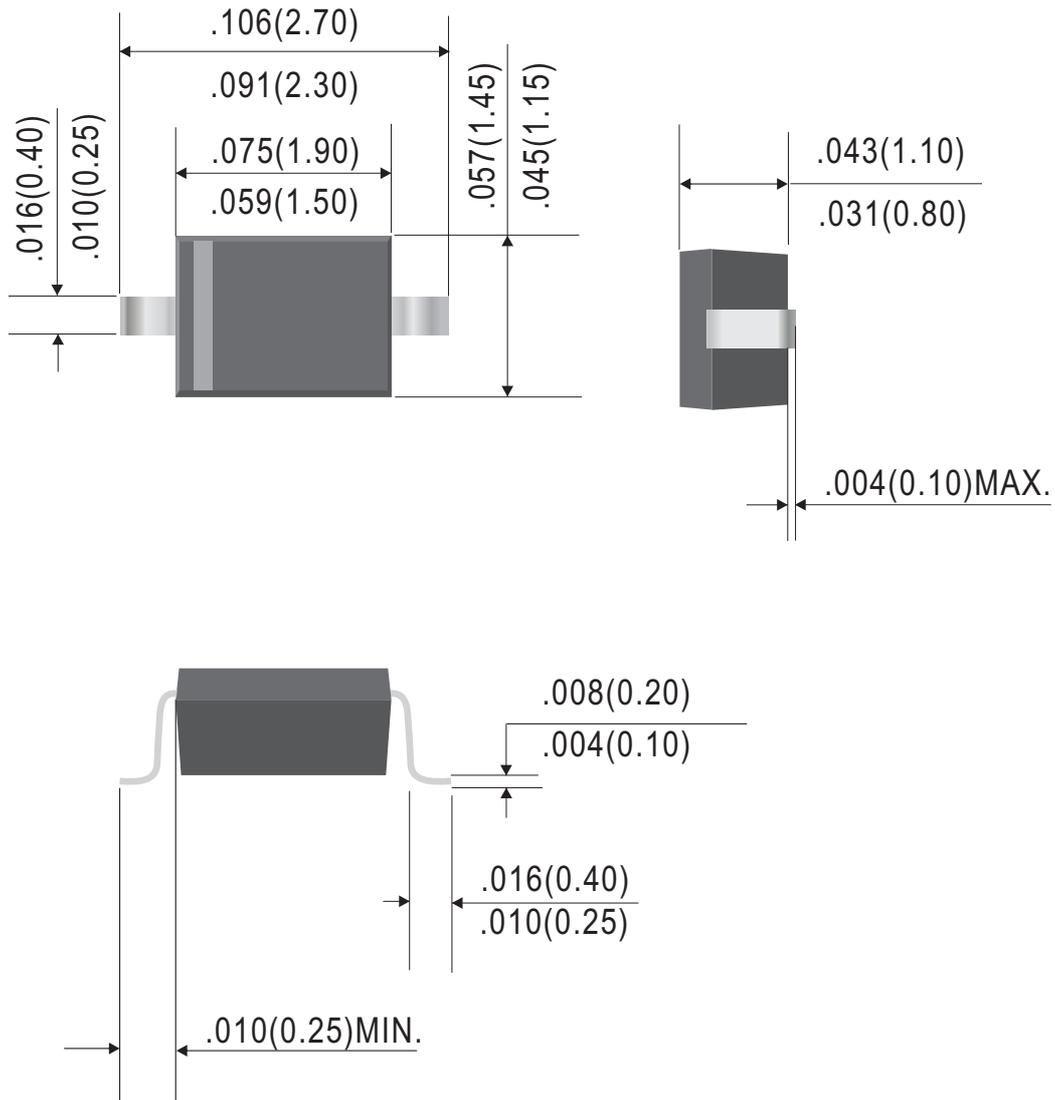
# WILLAS



200mA Surface Mount Switching Diode - 100V  
SOD-323 Package

MMDL914

## SOD-323



Dimensions in inches and (millimeters)

**Ordering Information:**

Device PN	Packing
MMDL914-T <sup>(1)</sup> G <sup>(2)</sup> -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape&amp;Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

**\*\*\*Disclaimer\*\*\***

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