WILLAS

RoHS COMPLIANT

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

MMDL914

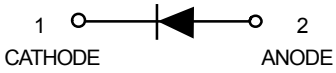
FETURE

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



SOD– 323

Polarity: Color band denotes cathode end



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°C	P_D	200	mW
Derate above 25°C		1.57	mW/°C
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	°C/W
Junction and Storage Temperature	T_J, T_{stg}	150	°C

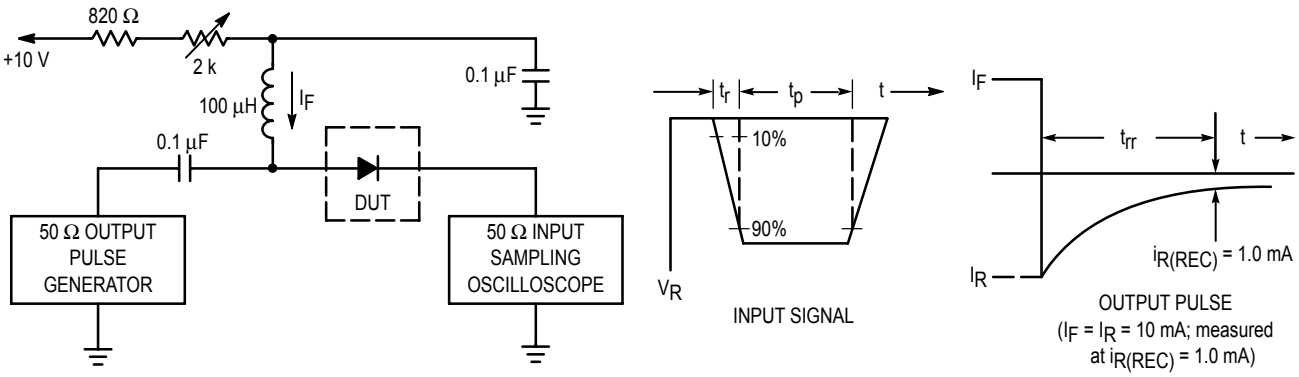
**FR-4 Minimum Pad

DEVICE MARKING

MMDL914 = 5D

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Reverse Breakdown Voltage (I_R = 100 µAdc)	$V_{(BR)}$	100	—	Vdc
Reverse Voltage Leakage Current	I_R			
(V_R = 20Vdc)		—	25	nAdc
(V_R = 75Vdc)		—	5.0	µAdc
Diode Voltage (V_R =0, f =1.0MHz)	C_T	—	4.0	pF
Forward Voltage (I_F = 10 mAdc)	V_F	—	1.0	Vdc
Reverse Recovery Time (I_F = I_R = 10 mAdc) (Figure 1)	t_{rr}	—	4.0	ns



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

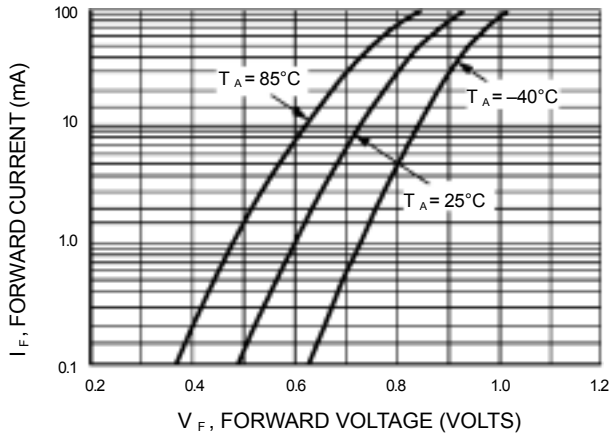


Figure 2. Forward Voltage

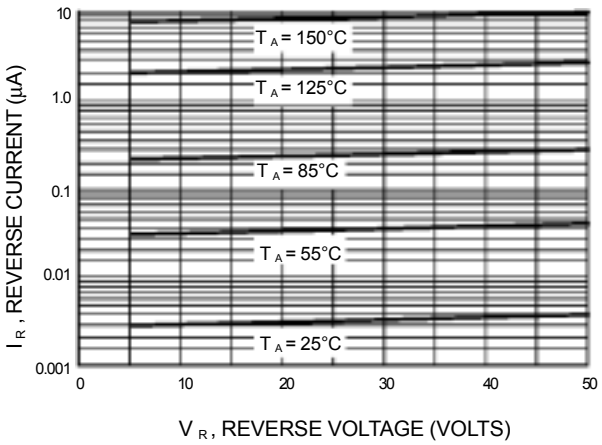


Figure 3. Leakage Current

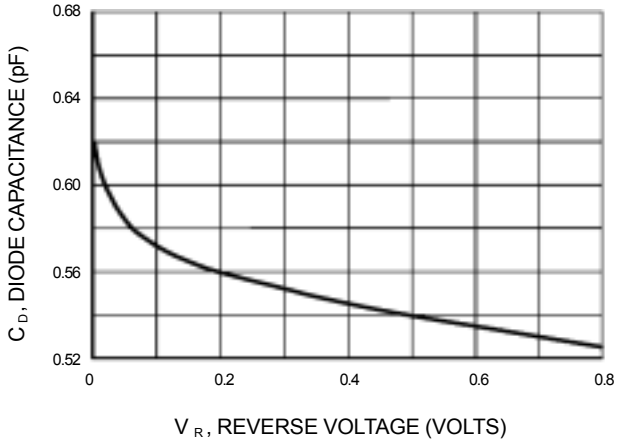


Figure 4. Capacitance

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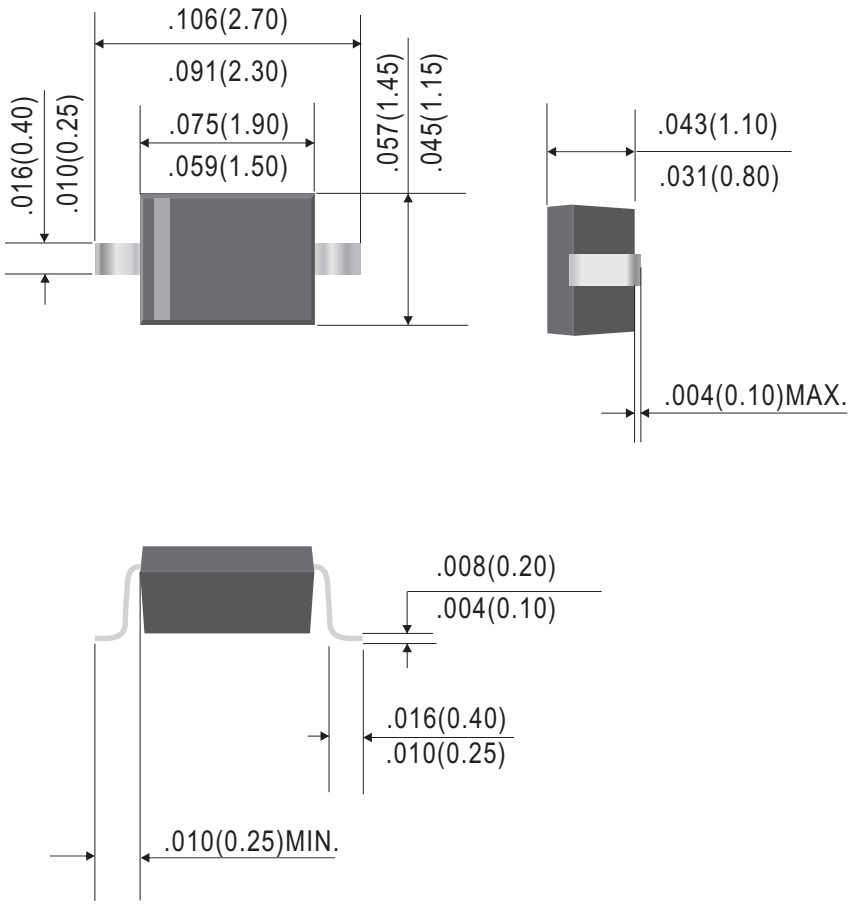
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SOD–323



Dimensions in inches and (millimeters)

SOLDERING FOOTPRINT*

