DESCRIPTION

The MDL914 is available in SOD-323 Package

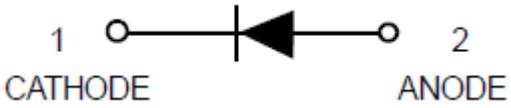
FEATURES

- Available in SOD-323 Package

ORDERING INFORMATION

Package Type	Part Number
SOD-323	MDL914
Note	3,000pcs/ Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



ABSOLUTE MAXIMUM RATINGS

V_R, Reverse Voltage	100Vdc
I_F, Forward Current	200mAdc
$I_{FM(SURGE)}$, Peak Forward Surge Current	500mAdc

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

THERMAL CHARACTERISTICS

Parameter	Symbol	Max.	Unit
Total Device Dissipation FR-5 Board[NOTE1]			
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

NOTE1: FR-4 Minimum Pad

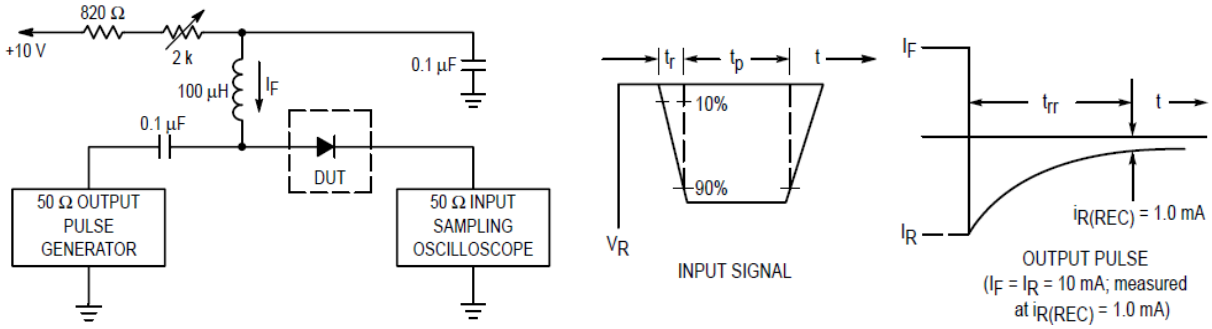
ELECTRICAL CHARACTERISTICS

T_A = 25°C unless otherwise noted

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

TYPICAL CHARACTERISTICS

Figure 1. Recovery Time Equivalent Test Circuit



NOTE2: A 2.0kΩ variable resistor adjusted for a Forward Current (I_F) of 10mA.

NOTE3: Input pulse is adjusted so $I_{R(PEAK)}$ is equal to 10mA.

NOTE4: $t_p \gg t_{rr}$

Figure 2. Forward Voltage

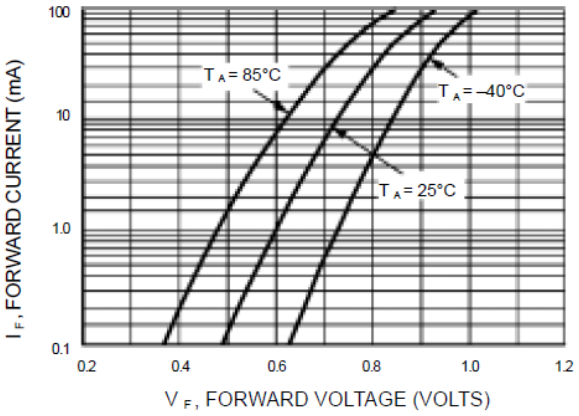


Figure 3. Leakage Current

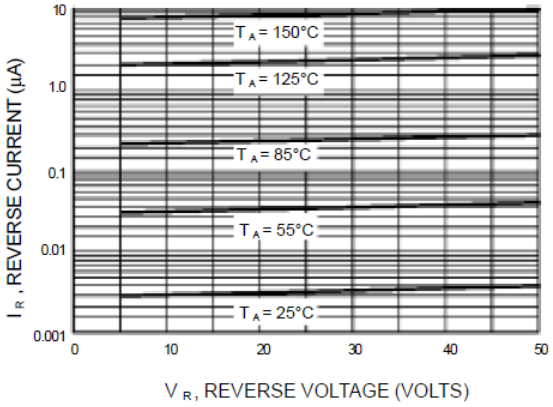
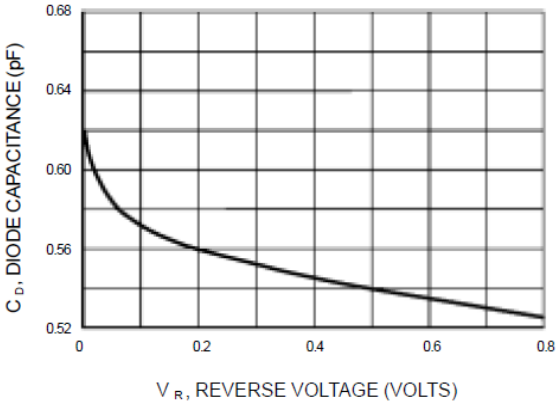
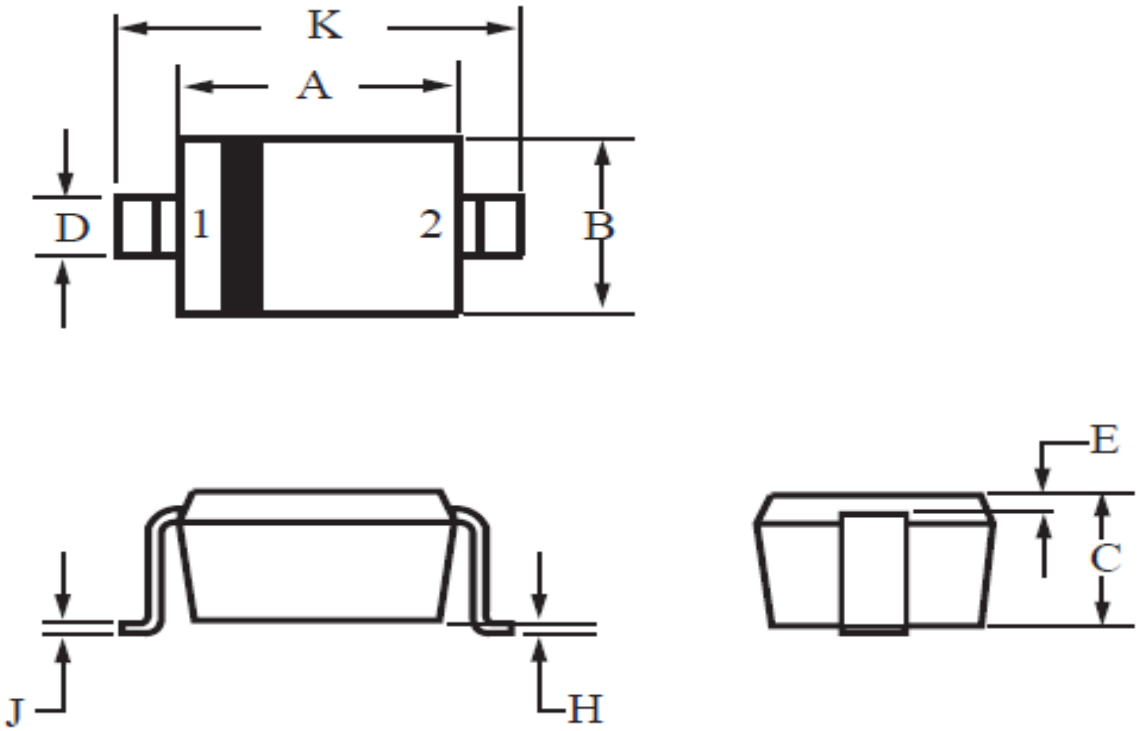


Figure 4. Capacitance



PACKAGE INFORMATION

Dimension in SOD–323 Package (Unit: mm)



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.600	1.800	0.063	0.071
B	1.150	1.350	0.045	0.053
C	0.800	1.000	0.031	0.039
D	0.250	0.400	0.010	0.016
E	0.15 REF		0.006 REF	
H	0.000	0.100	0.000	0.004
J	0.089	0.177	0.0035	0.0070
K	2.300	2.700	0.091	0.106

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