



DESCRIPTION

The MDL914 is available in SOD-323 Package

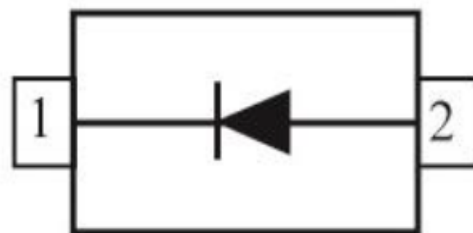
FEATURES

- Available in SOD-323 Package

ORDERING INFORMATION

Package Type	Part Number
SOD-323	MDL914
Note	SPQ: 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_{FMS} , 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	Limits	Unit
Total Device Dissipation FR-5 Board ^{NOTE1} $T_A=25^\circ\text{C}$ Derate above 25°C	P_D	200 1.57	mW mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient ^{NOTE1}	$R_{\theta JA}$	635	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature	T_J, T_{STG}	-55~150	$^\circ\text{C}$

NOTE1: FR-4 = 1.0×0.75×0.062 in.

ELECTRICAL CHARACTERISTICS

$T_A = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100\mu\text{Adc}$	100	-	-	V
Reverse Voltage Leakage Current	I_R	$V_R=20\text{Vdc}$	-	-	25	nA
		$V_R=75\text{Vdc}$	-	-	5.0	μA
Diode Capacitance	C_T	$V_R=0\text{V}, f=1.0\text{MHz}$	-	-	4.0	pF
Forward Voltage	V_F	$I_F=10\text{mAdc}$	-	-	1.0	V
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mAdc}$	-	-	4.0	ns
Non-Repetitive Peak Forward Current	I_{FSM}	square wave; $T_J=25^\circ\text{C}$ prior to surge $t=1\mu\text{s}$	-	-	4.0	A
		$t=1\text{ms}$	-	-	1	
		$t=1\text{s}$	-	-	0.5	



TYPICAL CHARACTERISTICS

Figure 1. Forward Characteristics

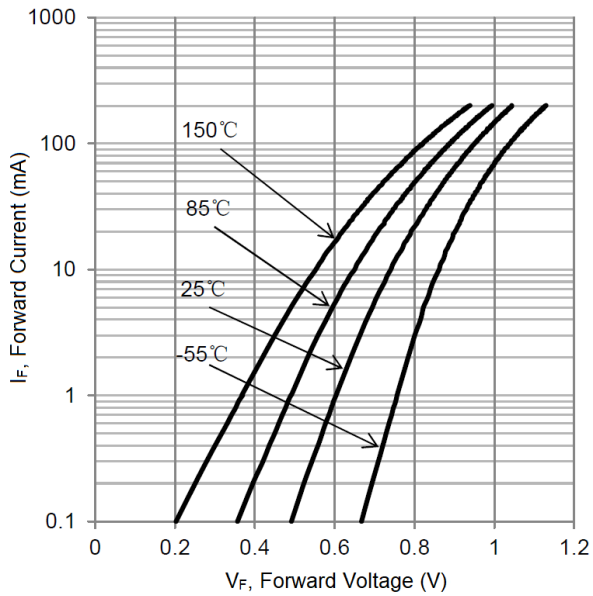


Figure 2. Reverse Characteristics

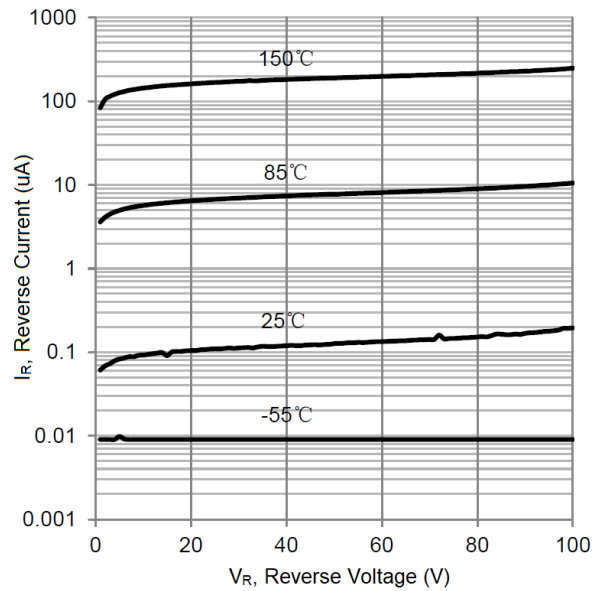
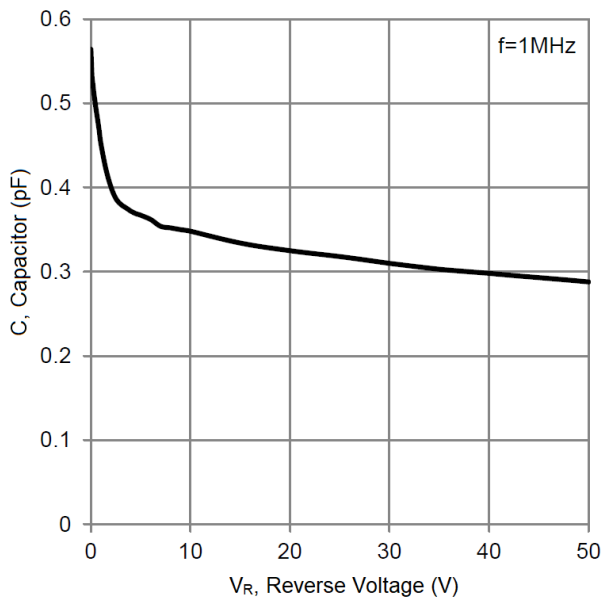


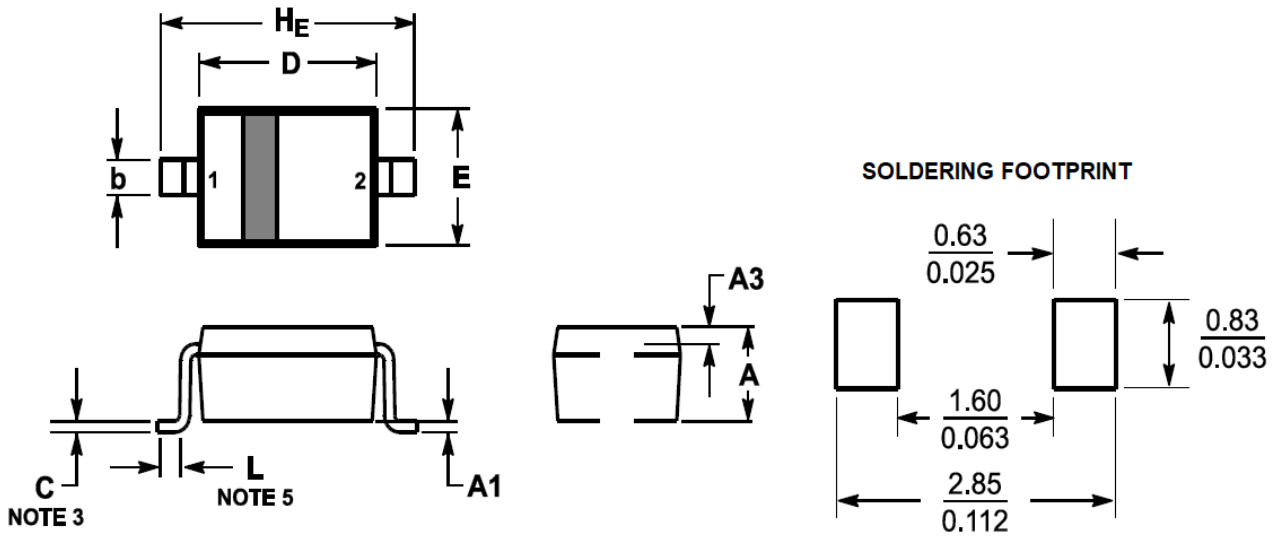
Figure 3. Capacitor Characteristics





PACKAGE INFORMATION

Dimension in SOD-323 Package (Unit: mm)



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.80	1.00	0.031	0.040
A1	0.00	0.10	0.000	0.004
A3	0.15 REF		0.006 REF	
b	0.25	0.40	0.010	0.016
C	0.089	0.177	0.003	0.007
D	1.60	1.80	0.062	0.070
E	1.15	1.35	0.045	0.053
L	0.08	-	0.003	-
HE	2.30	2.70	0.090	0.105



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