

PRIMARY CHARACTERISTICS

P_D	200mW
V_R	100V
I_F	200mA
V_F	1V
T_{rr}	4ns
$T_{J,Max}$	150°C

FEATURES

- High Speed Switching Diode
- Moisture Sensitivity Level 1

● MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

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

● THERMAL CHARACTERISTICS

Total Device Dissipation, FR-5 Board (Note 1) @ $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	200 1.57	mW mW/°C
Thermal Resistance, Junction-to-Ambient(Note 1)	$R_{\theta JA}$	635	°C/W
Junction and Storage temperature	T_J, T_{stg}	-55 ~ +150	°C

1. FR-5 = 1.0×0.75×0.062 in.

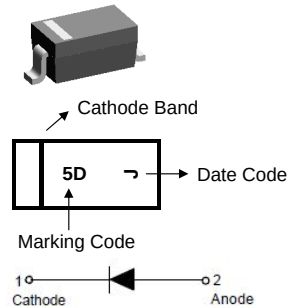
● ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage ($I_R = 100\mu\text{Adc}$)	V_{BR}	100	—	—	V
Reverse Voltage Leakage Current ($V_R = 20\text{Vdc}$) ($V_R = 75\text{Vdc}$)	I_R	—	—	25 5	nA μA
Diode Capacitance ($V_R = 0, f = 1.0\text{MHz}$)	C_T	—	—	4	pF
Forward Voltage ($I_F = 10\text{mAdc}$)	V_F	—	—	1	V
Reverse Recovery Time ($I_F = I_R = 10\text{mAdc}$) (Figure 1)	t_{rr}	—	—	4	ns

SOD-323

PACKAGE

● Body Marking : 5D

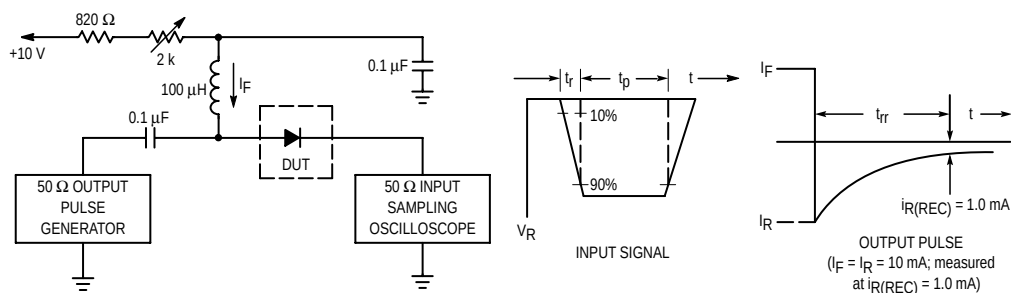


Data Code List

Month	Odd Year	Even Year
Jan	1	E
Fed	2	F
Mar	3	H
Apr	4	J
May	5	K
Jun	6	L
Jul	7	N
Aug	8	P
Sep	9	U
Oct	T	X
Nov	V	Y

MECHANICAL DATA

- Case : Molded plastic, SOD-323
- Polarity : Shown above
- Epoxy : UL94-V0 rated flame retardant



Notes: 1. A 2.0 k Ω variable resistor adjusted for a Forward Current (I_F) of 10mA.
2. Input pulse is adjusted so $I_{R(\text{peak})}$ is equal to 10mA.
3. $t_a \gg t_r$

Figure 1. Recovery Time Equivalent Test Circuit

ELECTRICAL CHARACTERISTICS CURVES

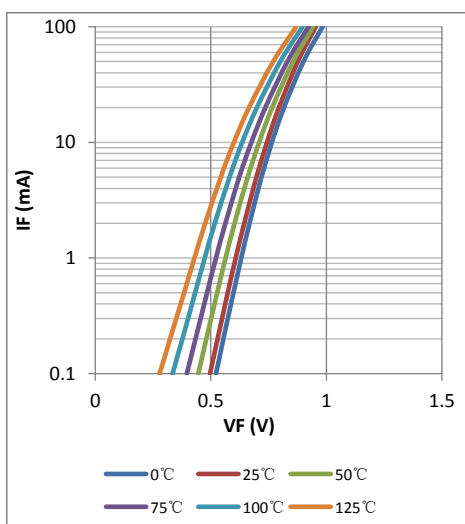


Fig 2. Forward character

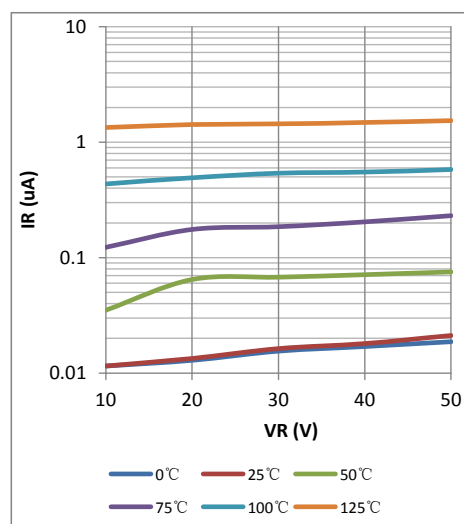


Fig 3. Reverse character

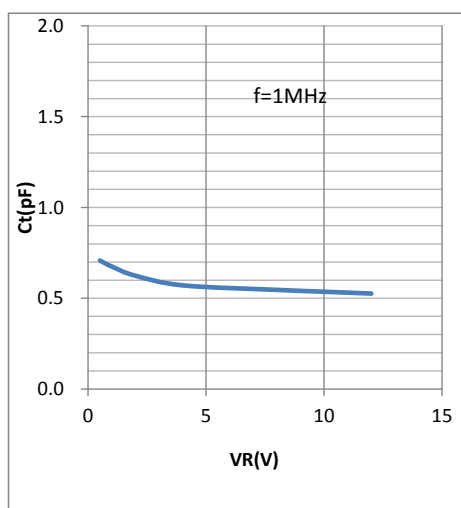
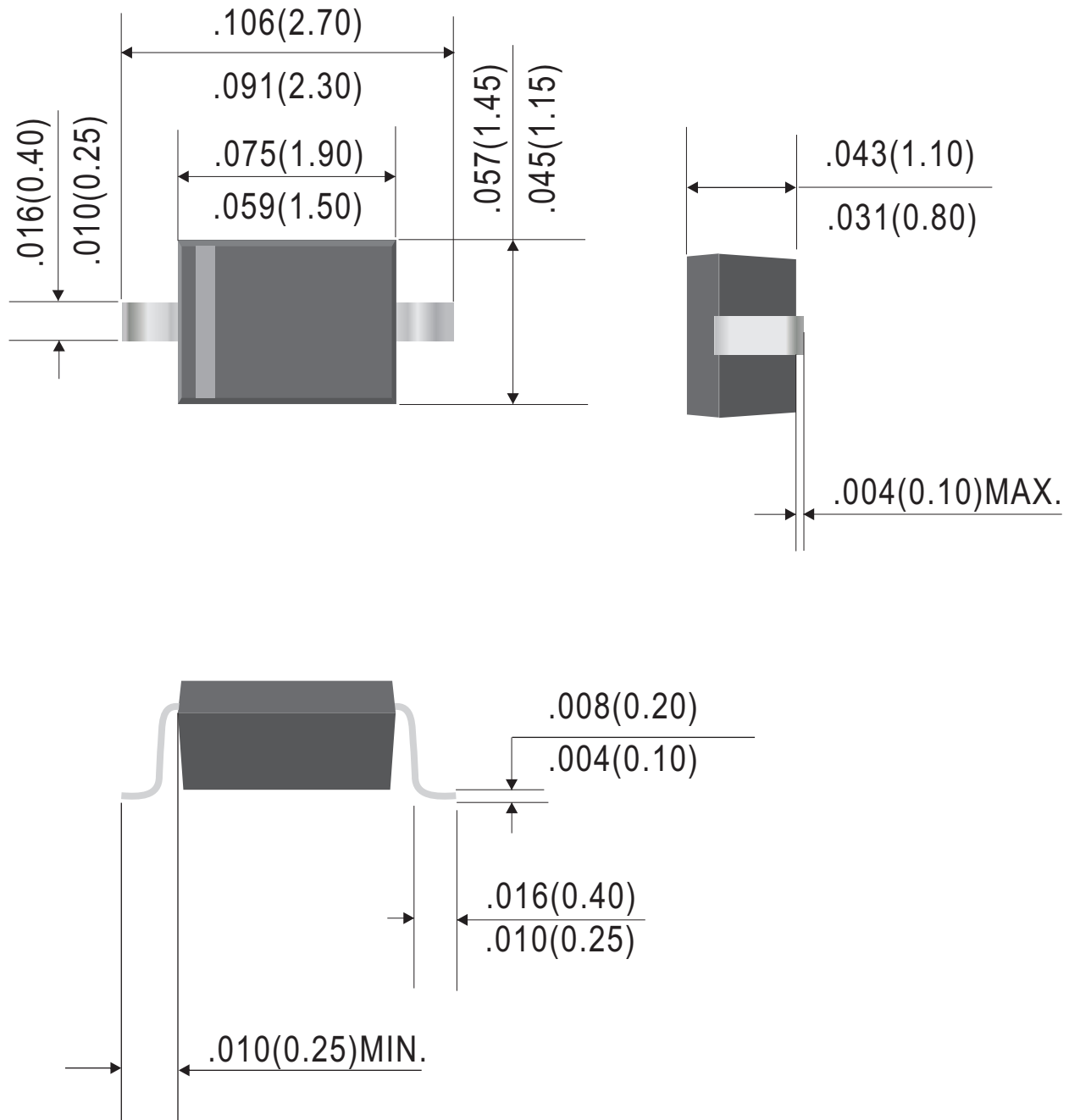


Fig 4. Capacitance between terminals character



Outline Drawing

SOD-323



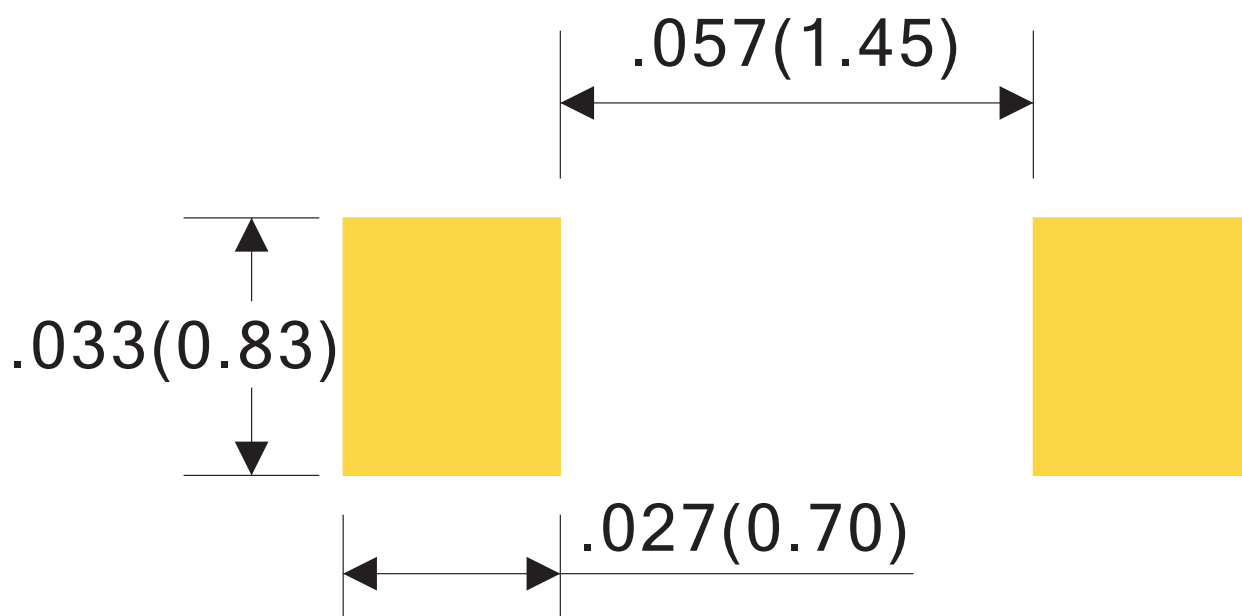
Dimensions in inches and (millimeters)

Rev.C



Suggested Soldering Pad Layout

SOD-323



Dimensions in inches and (millimeters)

RevA

Ordering Information:

Device PN	Packing
MMDL914T1 ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

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

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

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