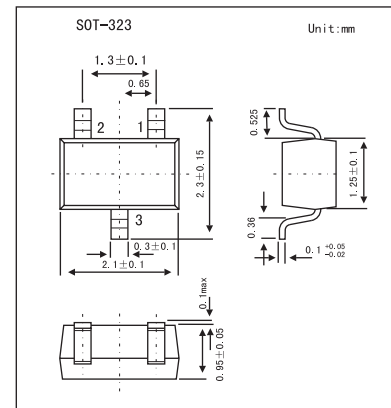


## SILICON SWITCHING DIODE

## 1SS305

## ■ Features

- Low capacitance:  $C_t = 4.0$  pF MAX.
- High speed switching:  $t_{rr} = 3.0$  ns MAX.
- Wide applications including switching, limiter, clipper.

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Peak Reverse Voltage	$V_{RM}$	100	V
DC Reverse Voltage	$V_R$	100	V
Peak Forward Current	$I_{FM}$	300	mA
Average Rectified Current	$I_o$	100	mA
DC Forward Current	$I_F$	100	mA
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +150	$^\circ\text{C}$
Junction to Ambient	$R_{th(j-a)}$	0.85	$^\circ\text{C mW}$

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward voltage	$V_{F(1)}$	$I_F = 10$ mA		720	850	mV
	$V_{F(2)}$	$I_F = 50$ mA		850	1000	
	$V_{F(3)}$	$I_F = 100$ mA		950	1200	
Reverse current	$I_R$	$V_R = 50$ V			1.0	$\mu\text{A}$
Capacitance	$C_t$	$V_R = 0, f = 1.0$ MHz		2.0	4.0	pF
Reverse recovery time	$t_{rr}$	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 100 \Omega$			3.0	ns

## ■ Marking

Marking	A14