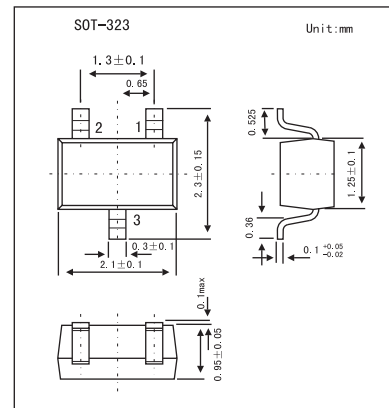


SILICON SWITCHING DIODE

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	μA
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