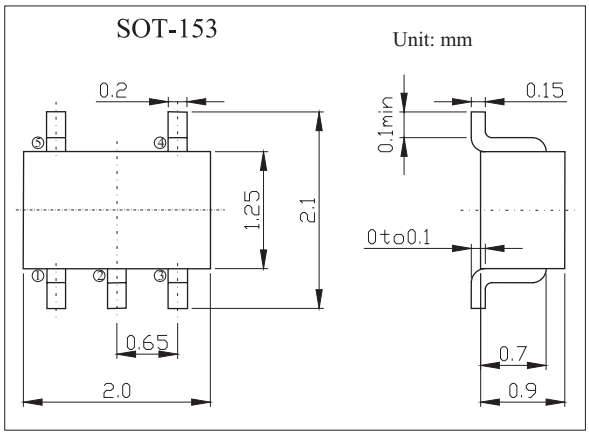
Ultra High Speed Switching Applications

1SS309



Features

- Low forward voltage: $V_{F\ (3)}$ = 0.90V (typ.)
- Fast reverse recovery time:t_{rr} = 1.6ns(typ.)
- Small total Capacitance:C_T = 0.9pF(typ.)

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	85	V
Reverse voltage	V_R	80	V
Maximum (peak) forward current	I_{FM}	300(1)	mA
Average forward current	I_O	100(1)	mA
Surge current (10 ms)	I_{FSM}	2(1)	A
Power dissipation	P	200	mW
Junction temperature	T_j	125	℃
Storage temperature range	T_{stg}	-55 to +125	℃

Note

1.Unit Rating.Total Rating = Unit Rating × 1.5

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_{F(1)}$	I_F = 1 mA		0.60		V
	$V_{F(2)}$	I_F = 10 mA		0.72		
	$V_{F(3)}$	I_F = 100 mA		0.92	1.20	
Reverse current	$I_{R(1)}$	V_R = 30 V			0.1	μA
	$I_{R(2)}$	V_R = 80 V			0.5	
Total capacitance	C_T	V_R=0 V,f=1 MHz		0.9	3.0	pF
Reverse recovery time	t_{rr}	I_F = 10 mA		1.6	4.0	ns

Marking

Marking	A2