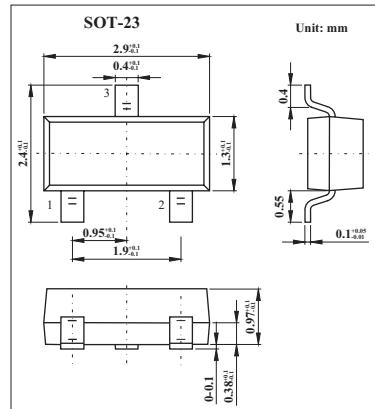


# ULTRA HIGH SPEED SWITCHING APPLICATION

## 1SS344

### ■ Features

- Low forward voltage:  $V_F(3) = 0.50V$ (Typ).
- Fast reverse recovery time:  $t_{rr} = 20ns$ (Typ).
- High average forward current:  $I_o = 0.5A$ (Max).



### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Maximum(Peak) Reverse Voltage	$V_{RM}$	25	V
Reverse Voltage	$V_R$	20	V
Maximum(Peak) Forward Current	$I_{FM}$	1500	mA
Average Rectified Current	$I_o$	500	mA
Surge Current (10 ms)	$I_{FSM}$	5	A
Power Dissipation	$P$	200	mW
Junction Temperature	$T_j$	125	°C
Storage Temperature Range	$T_{stg}$	-55 to +125	°C
Operating Temperature	$T_{opr}$	-40 to +100	°C

### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Continuous reverse voltage	$V_F$	$I_F = 10 \text{ mA}$		0.30		V
		$I_F = 100 \text{ mA}$		0.38		
		$I_F = 500 \text{ mA}$		0.50	0.55	
Reverse current	$I_R$	$V_R = 30 \text{ V}$			20	$\mu \text{ A}$
	$I_R$	$V_R = 80 \text{ V}$			100	
capacitance	$C_t$	$V_R = 0, f = 1.0 \text{ MHz}$		120		pF
Reverse recovery time	$t_{rr}$	$I_F = 30 \text{ mA}$		20		ns

### ■ Marking

Marking	H9
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