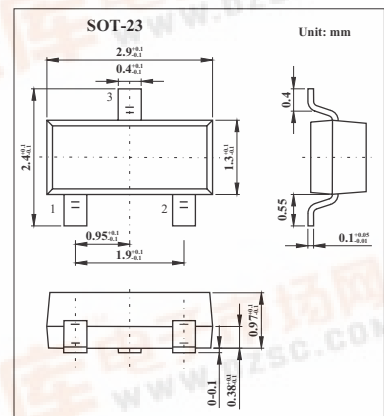


SMD Type Diodes

ULTRA HIGH SPEED SWITCHING APPLICATION  
1SS193

Features

- Small Package
- Low forward voltage : $V_F(3) = 0.9\text{ V(Typ.)}$
- Fast Reverse Recovery Time : $t_{rr} = 1.6\text{ ns(Typ.)}$
- Small Total Capacitance : $C_T = 0.9\text{ pF(Typ.)}$



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

Parameter	Symbol	Rating	Unit
Peak Reverse Voltage	$V_{RM}$	85	V
DC Reverse Voltage	$V_R$	80	V
Peak Reverse Current	$I_{RM}$	300	mA
Average Rectified Current	$I_o$	100	mA
Surge Current (10 ms)	$I_{FSM}$	2	A
DC Forward Current	$P$	150	mW
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Continuous reverse voltage	$V_F$	$I_F = 1.0\text{ mA}$		0.6		V
		$I_F = 10\text{ mA}$		0.72		
		$I_F = 100\text{ mA}$		0.9	1.2	
Reverse current	$I_R$	$V_R = 30\text{ V}$			0.1	$\mu\text{ A}$
		$V_R = 80\text{ V}$			0.5	
Total capacitance	$C_T$	$V_R = 0, f = 1.0\text{ MHz}$		0.9	3.0	pF
Reverse recovery time	$t_{rr}$	$I_F = 10\text{ mA}$		1.6	4.0	ns

Marking

Marking	F3
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