

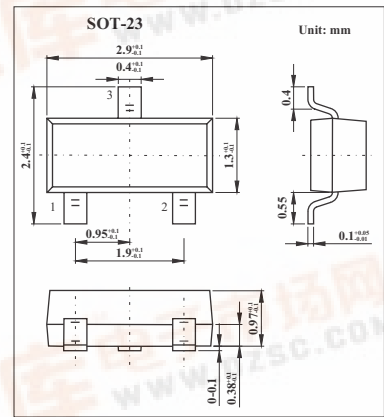
SMD Type Diodes

ULTRA HIGH SPEED SWITCHING APPLICATION

1SS190

■ Features

- Small Package
- Low forward voltage : $V_{F(3)} = 0.92 \text{ V(Typ.)}$
- Fast Reverse Recovery Time : $t_{rr} = 1.6 \text{ ns(Typ.)}$
- Small Total Capacitance : $C_T = 2.2\text{pF(Typ.)}$



■ 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_{FM}	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	$I_F = 1.0 \text{ mA}$		0.61		V
		$I_F = 10 \text{ mA}$		0.74		
		$I_F = 100 \text{ mA}$		0.92	1.2	
Reverse current	I_R	$V_R = 30 \text{ V}$			0.1	μA
		$V_R = 80 \text{ V}$			0.5	
Total capacitance	C_T	$V_R = 0, f = 1.0 \text{ MHz}$		2.2	4.0	pF
Reverse recovery time	t_{rr}	$I_F = 10 \text{ mA}$		1.6	4.0	ns

■ Marking

Marking	E3
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