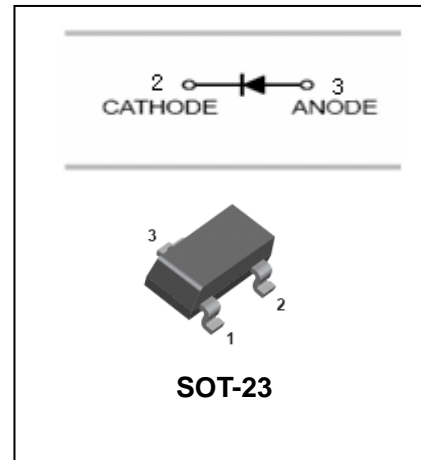


Surface mount switching diode

**1SS190**

**FEATURES**

- Low forward voltage  
 $V_F=0.92V(\text{typ})$ .
- Small total capacitance: $C_T=2.2pF(\text{typ})$ .
- Fast reverse recovery time: $t_{rr}=1.6ns(\text{typ})$



**APPLICATIONS**

- High speed switching application.

**ORDERING INFORMATION**

Type No.	Marking	Package Code
1SS190	E3	SOT-23

**MAXIMUM RATING @ Ta=25°C unless otherwise specified**

Characteristic	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	85	V
DC Reverse Voltage	$V_R$	80	V
Forward Output current	$I_o$	100	mA
Surge current	$I_{FSM}$	2	A
Power Dissipation	$P_d$	350	mW
Operating Junction Temperature Range	$T_j$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

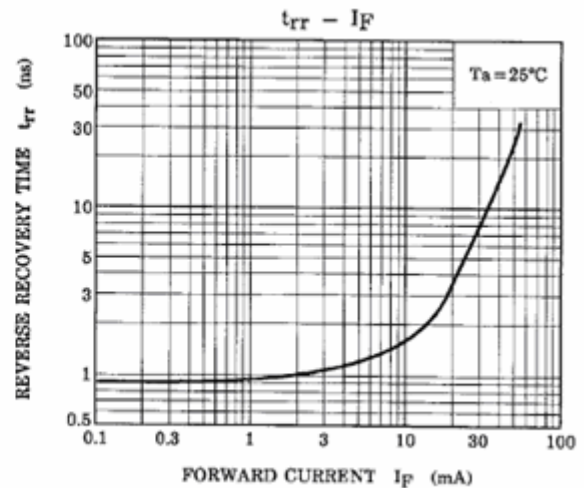
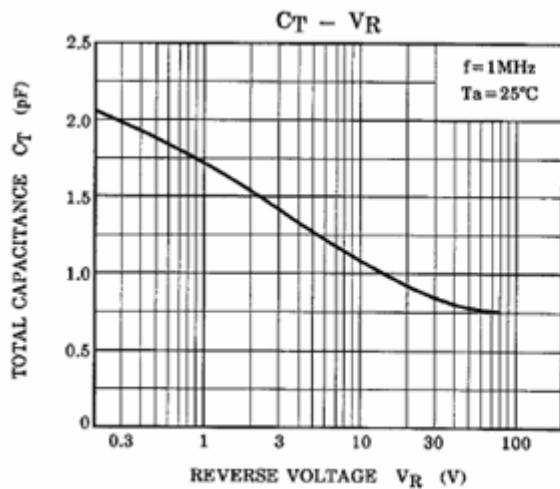
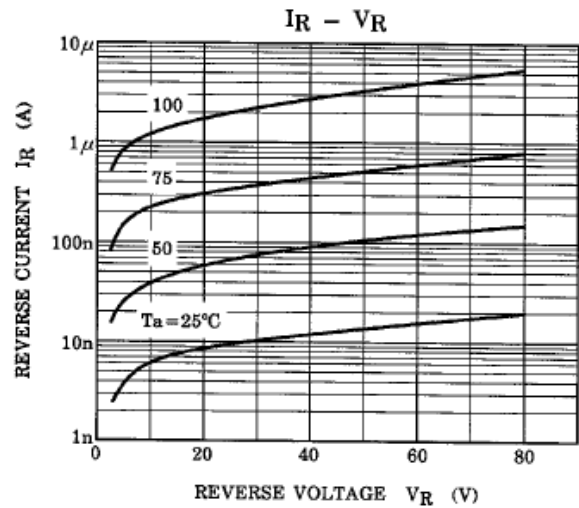
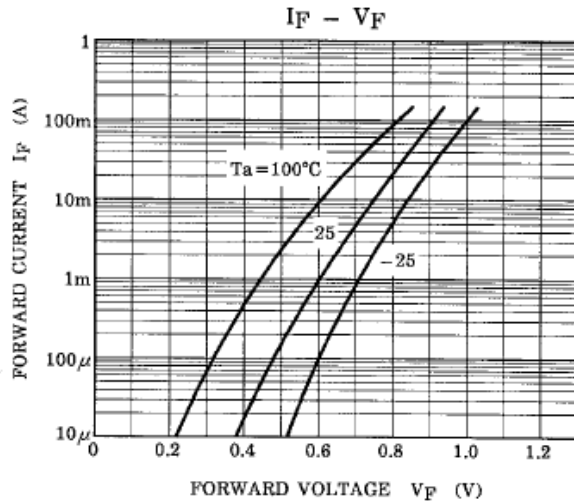
Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	80	-	-	V	$I_R=100\mu A$
Forward Voltage	$V_F$	-	0.61 0.74 0.92	- - 1.2	V	$I_F=1mA$ $I_F=10mA$ $I_F=100mA$
Reverse Leakage Current	$I_R$	-	-	0.1 0.5	$\mu A$	$V_R=30V$ $V_R=80V$
Total Capacitance	$C_T$	-	2.2	4.0	pF	$V_R=0V, f=1.0MHz$
Reverse Recovery Time	$t_{rr}$	-	1.6	4.0	ns	$I_F=I_R=10mA, I_{rr}=0.1 \cdot I_R$



Surface mount switching diode

1SS190

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified



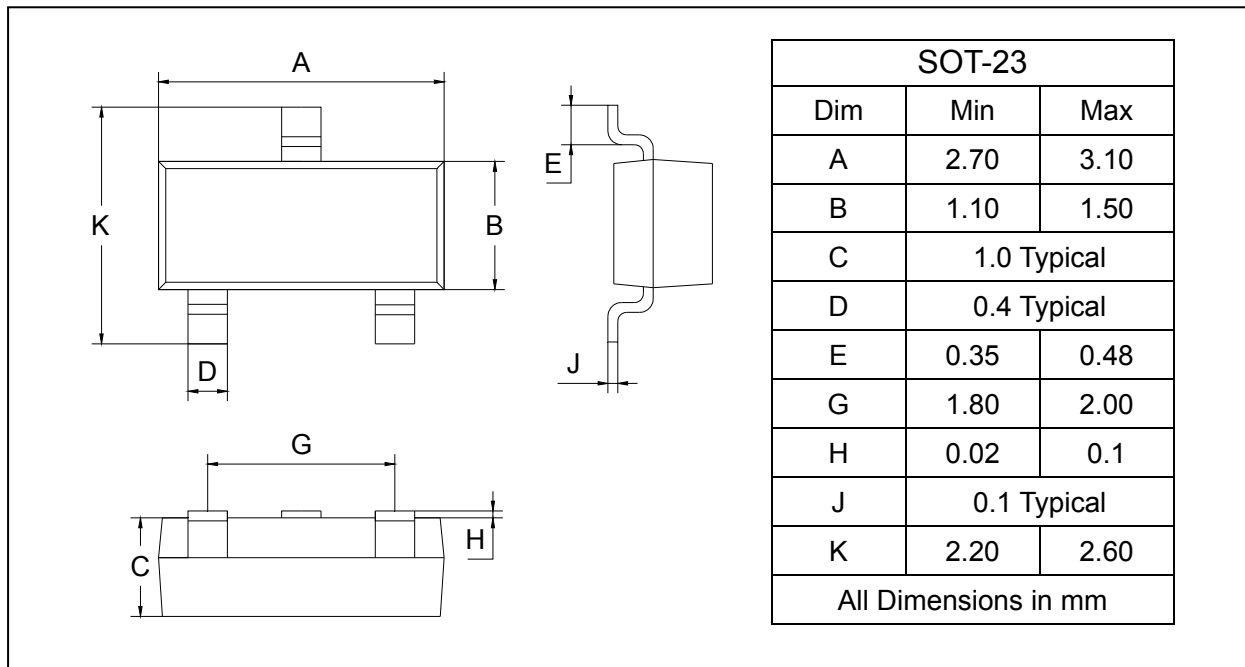
Surface mount switching diode

**1SS190**

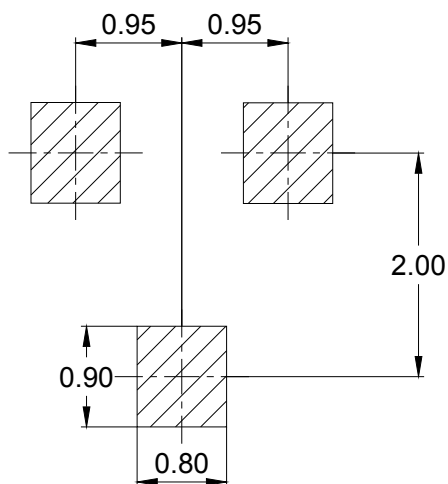
**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-23



**SOLDERING FOOTPRINT**



Unit : mm

**PACKAGE INFORMATION**

Device	Package	Shipping
1SS190	SOT-23	3000/Tape&Reel