

## Surface mount switching diode

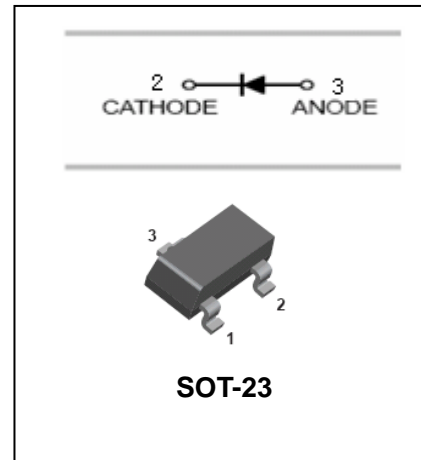
## 1SS190

### FEATURES

- Low forward voltage  
 $V_{F(3)}=0.92V(\text{typ})$ .
- Fast switching.
- Fast reverse recovery time:  $t_{rr}=1.6ns(\text{typ})$



Lead-free



**SOT-23**

### 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 Continuous Current(max)	$I_{FM}$	300	mA
Forward Output current	$I_o$	100	mA
Surge current	$I_{FSM}$	2	A
Power Dissipation	$P_d$	150	mW
Operating Junction Temperature Range	$T_j$	125	°C
Storage Temperature Range	$T_{STG}$	-55 to +125	°C

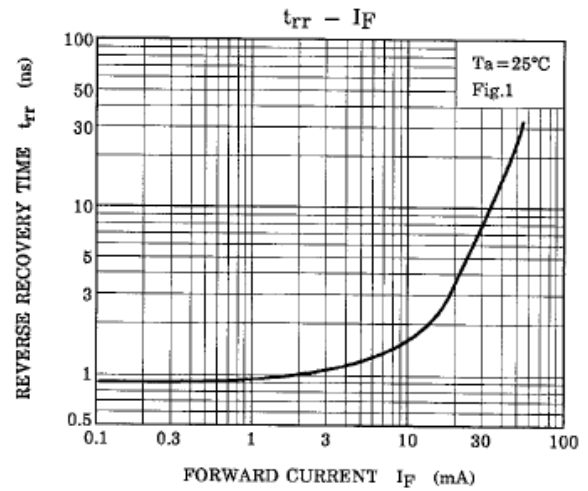
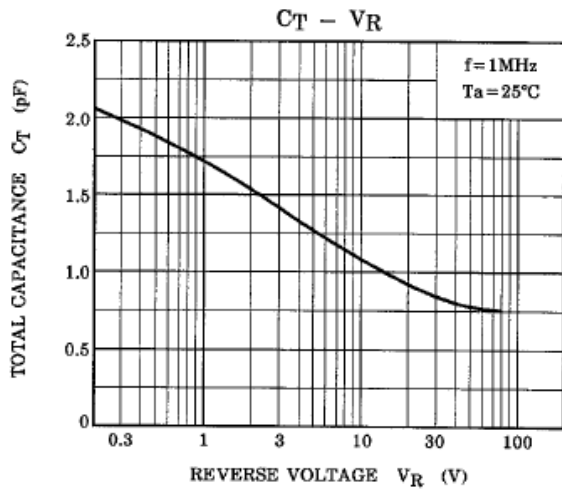
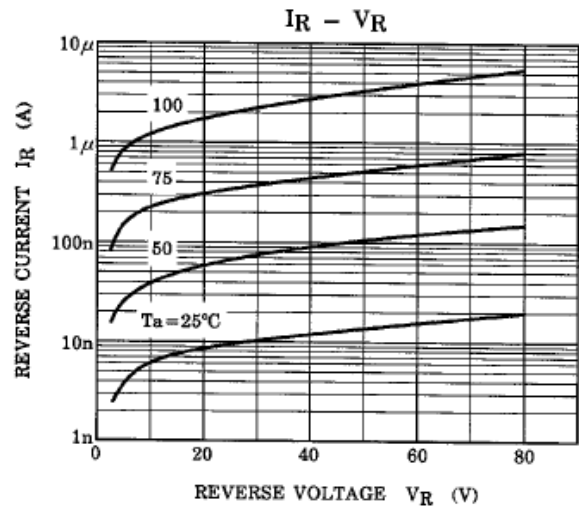
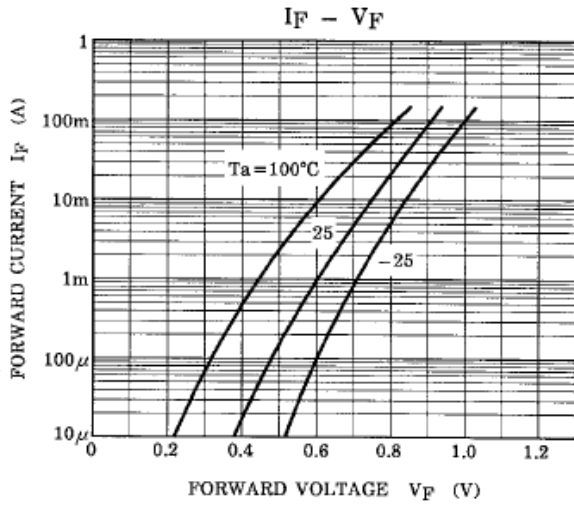
### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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	$I_F=I_R=10mA, I_{tr}=0.1 \cdot I_R$

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



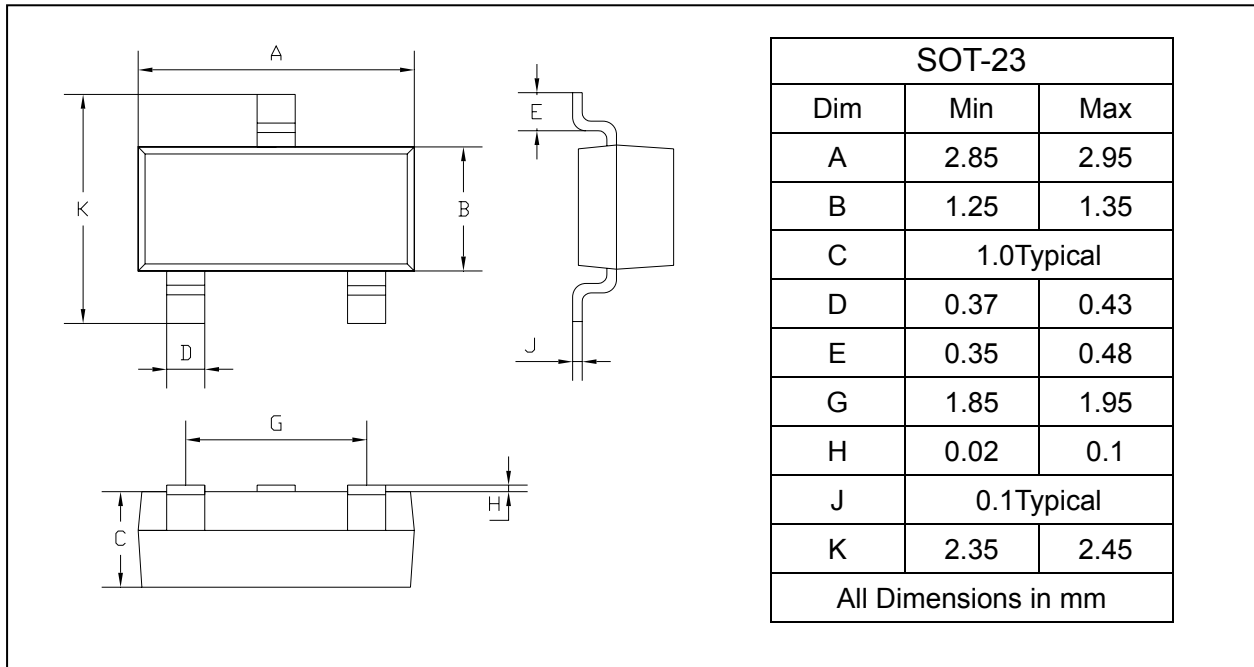
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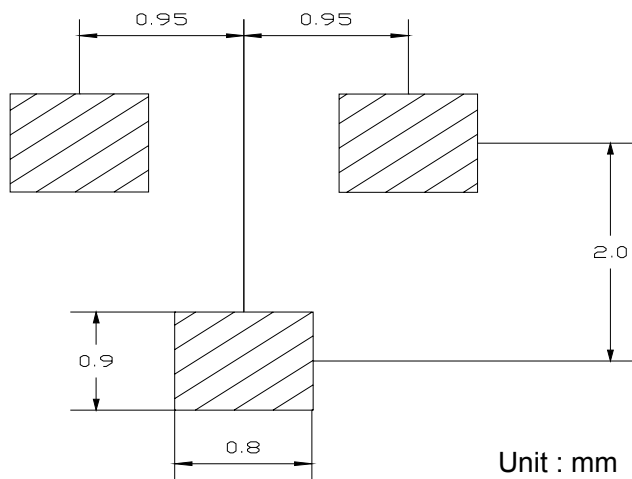
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

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

[www.s-manuals.com](http://www.s-manuals.com)