

## Surface mount switching diode

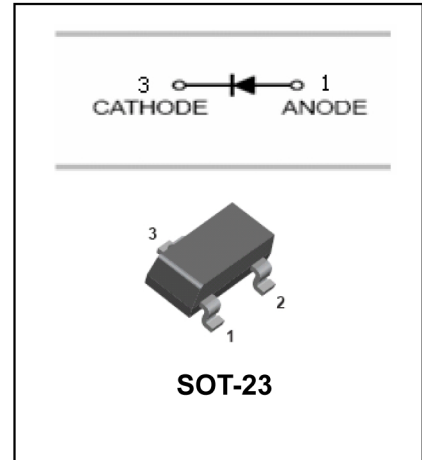
## 1SS193

### FEATURES

- Low forward voltage  
 $V_{F(3)}=0.9V(\text{typ})$ .
- Small total capacitance: $C_T=0.9pF(\text{typ})$ .
- 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
1SS193	F3	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	$P_d$	150	mW
Operating Junction Temperature Range	$T_j$	125	°C
Storage Temperature Range	$T_{STG}$	-55 to +125	°C

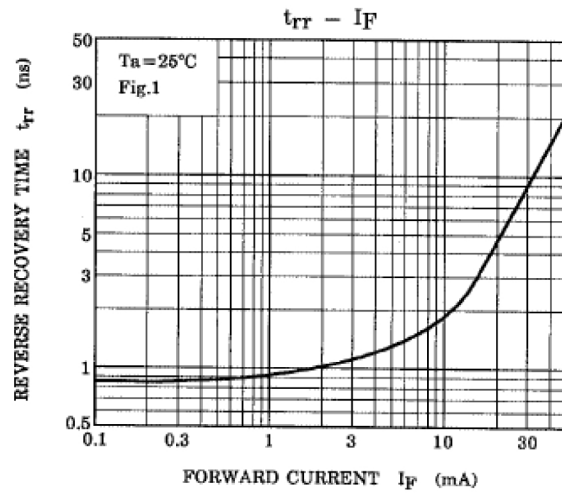
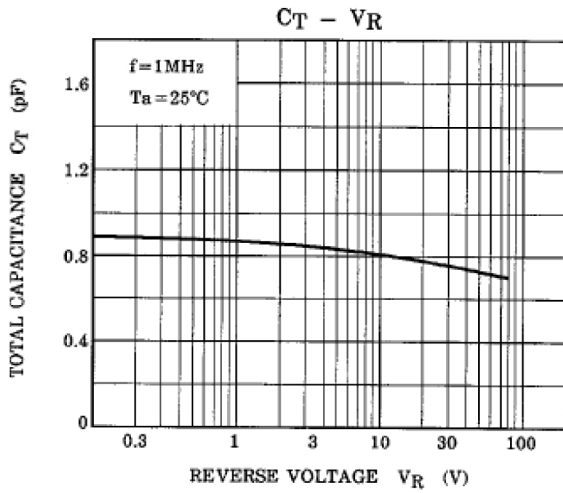
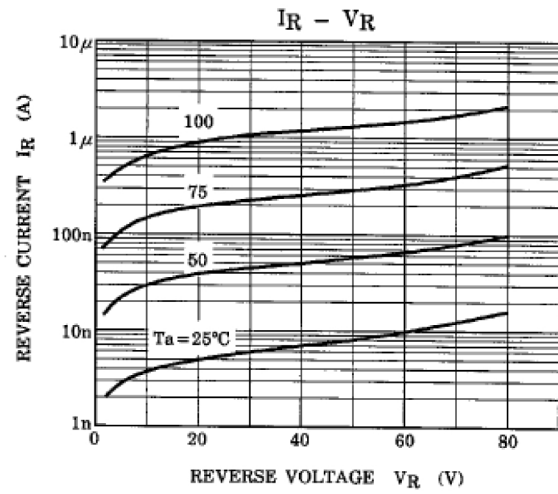
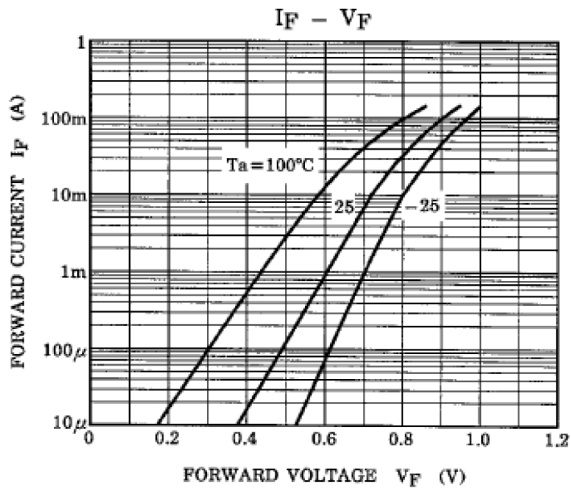
### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	80	-	-	V	$I_R=100\mu A$
Forward Voltage	$V_F$	-	0.60 0.72 0.90	- - 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	$C_T$	-	0.90	3.0	pF	$V_R=0V, f=1.0MHz$
Reverse Recovery Time	$t_{rr}$	-	1.6	4.0	ns	$I_F=I_R=10mA, I_{tr}=0.1 \cdot I_R$

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

## Surface mount switching diode

## 1SS193



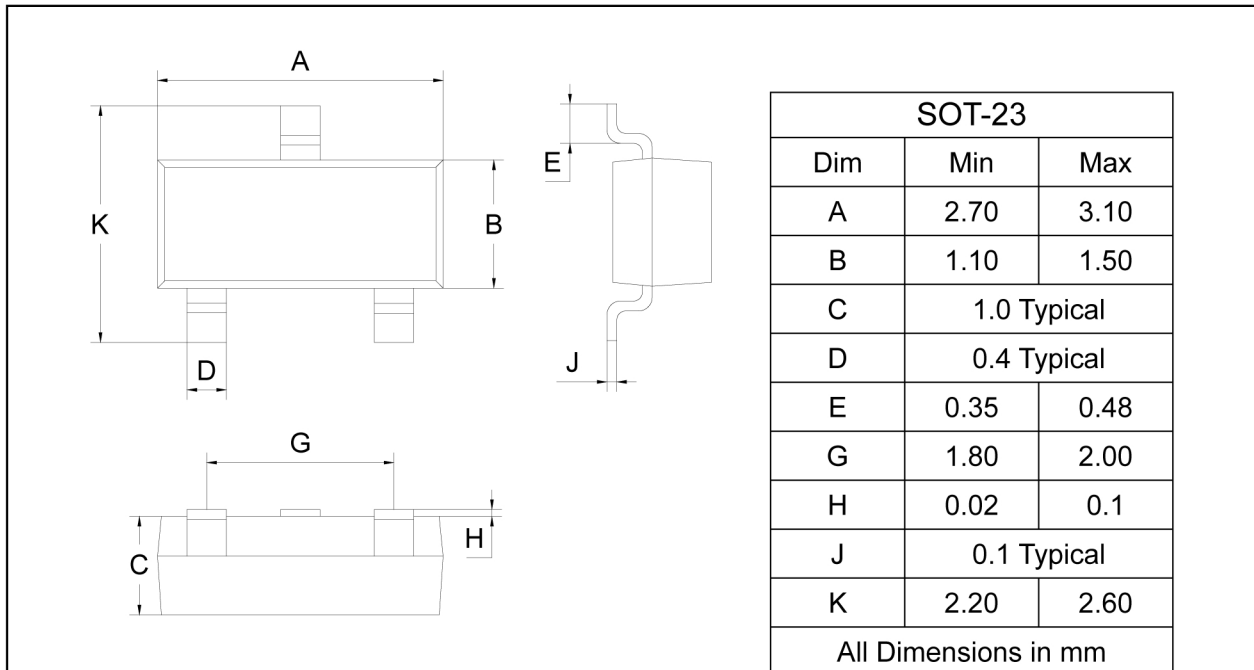
## PACKAGE OUTLINE

## Surface mount switching diode

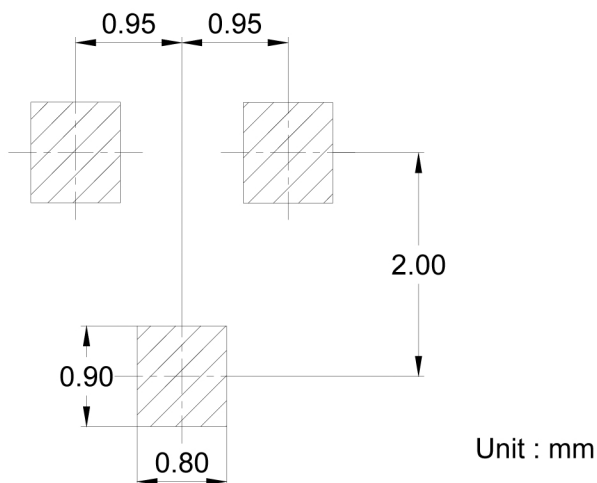
## 1SS193

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
1SS193	SOT-23	3000/Tape&Reel