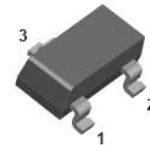
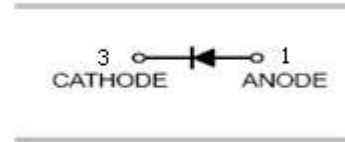




## Surface mount switching diode

### FEATURES

- Low forward voltage  
 $V_{F(3)}=0.9V(\text{typ})$ .
- Small total capacitance:  $C_T=0.9pF(\text{typ})$ .
- Fast reverse recovery time:  $t_{rr}=1.6ns(\text{typ})$ .



**SOT-23**

### APPLICATIONS

- High speed switching application.

### ORDERING INFORMATION

Type No.	Marking	Package Code
1SS193	F3	SOT-23

none is for Lead Free package;

"G" is for Halogen Free package.

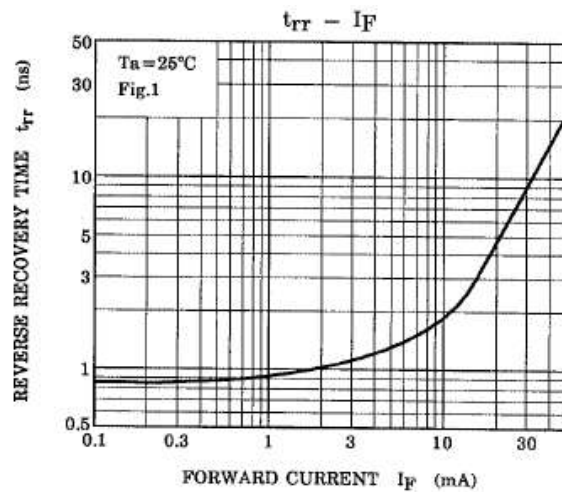
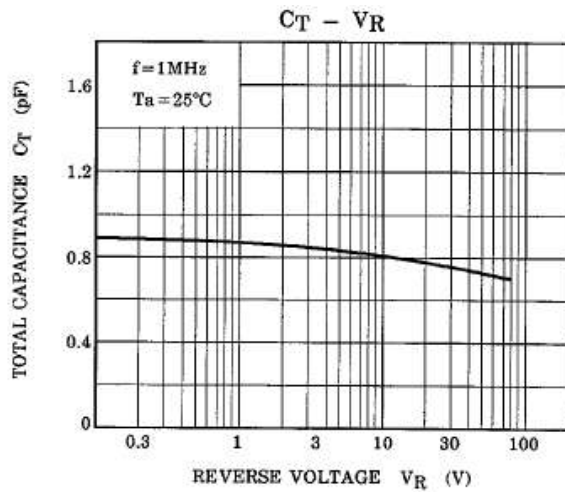
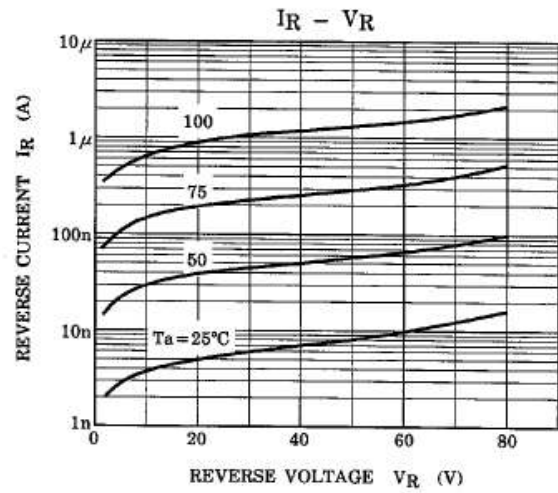
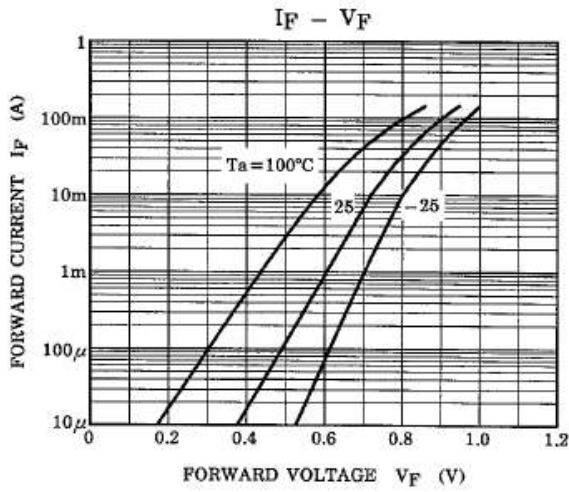
### MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

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	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

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

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	80	-	-	V	$I_R=100\mu\text{A}$
Forward Voltage	$V_F$	-	0.60	-	V	$I_F=1\text{mA}$
		-	0.72	-		$I_F=10\text{mA}$
		-	0.90	1.2		$I_F=100\text{mA}$
Reverse Leakage Current	$I_R$	-	-	0.1	$\mu\text{A}$	$V_R=30\text{V}$
		-	-	0.5		$V_R=80\text{V}$
Total Capacitance	$C_T$	-	0.90	3.0	pF	$V_R=0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$	-	1.6	4.0	ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \cdot I_R$

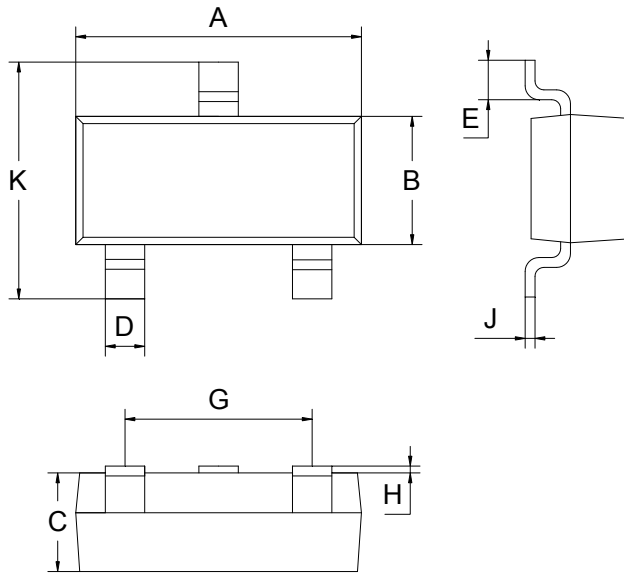
TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified



## PACKAGE OUTLINE

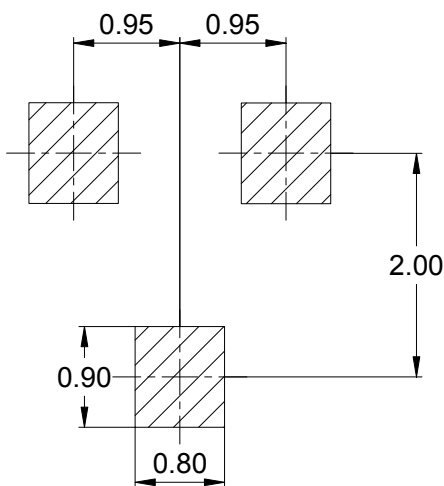
Plastic surface mounted package

SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	0.90	1.10
D	0.30	0.50
E	0.35	0.48
G	1.80	2.00
H	0.02	0.10
J	0.05	0.15
K	2.20	2.60
All Dimensions in mm		

## SOLDERING FOOTPRINT



Unit : mm

## PACKAGE INFORMATION

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