



# TIGER ELECTRONIC CO.,LTD



## SOT-23 Plastic-Encapsulate Diodes

### 1SS193 Switching DIODES

SOT-23



- 1. ANODE
- 2. N.C.
- 3. CATHODE

#### FEATURES

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

MARKING: F3

#### Maximum Ratings @ $T_A=25^\circ C$

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	$V_{RM}$	85	V
DC Blocking Voltage	$V_R$	80	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	100	mA
Power Dissipation	$P_D$	150	mW
Junction temperature	$T_J$	125	$^\circ C$
Storage temperature range	$T_{STG}$	-55-125	$^\circ C$

#### Electrical Characteristics @ $T_A=25^\circ C$

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	80			V	$I_R=100\mu A$
Forward voltage	$V_{F1}$		0.60		V	$I_F=1mA$
	$V_{F2}$		0.72		V	$I_F=10mA$
	$V_{F3}$		0.90	1.2	V	$I_F=100mA$
Reverse current	$I_{R1}$			0.1	$\mu A$	$V_R=30V$
	$I_{R2}$			0.5	$\mu A$	$V_R=80V$
Capacitance between terminals	$C_T$		0.9	3.0	pF	$V_R=0, f=1MHz$
Reverse recovery time	$t_{rr}$		1.6	4.0	ns	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R$

