



SOT-23 Plastic-Encapsulate Diodes

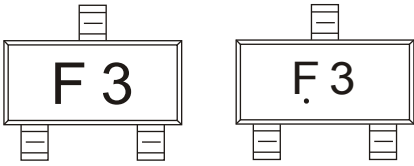
1SS193

Switching Diode

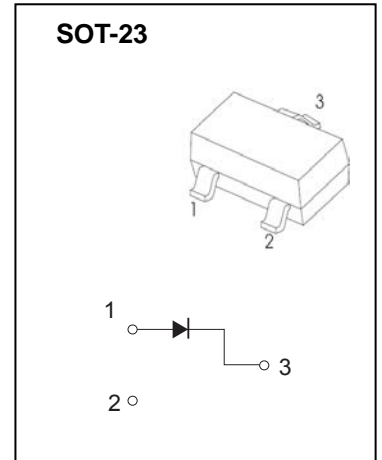
FEATURES

- Low forward voltage
- Fast reverse recovery time

MARKING: F3



Solid dot = Green molding compound device, if none, the normal device.



Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	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
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	833	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	°C

Electrical Characteristics @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	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	μA	$V_R=30V$
	I_{R2}			0.5	μA	$V_R=80V$
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	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R$

