

Small Signal Switching Diode

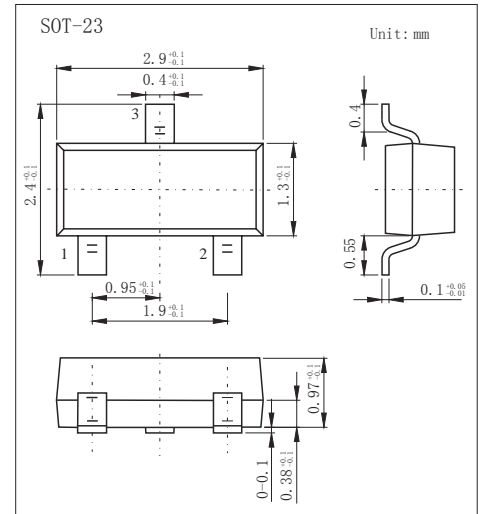
FEATURES

- Low forward voltage
- Fast reverse recovery time

MECHANICAL DATA

- Case: SOT-23 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

VOLTAGE RANGE: 85V
PEAK PULSE POWER: 150mW



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

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
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

Electrical Specification ($T_A=25@25^\circ\text{C}$ unless otherwise specified)

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

MARKING: F3

RATINGS AND CHARACTERISTIC CURVES

