

## Small Signal Switching Diode

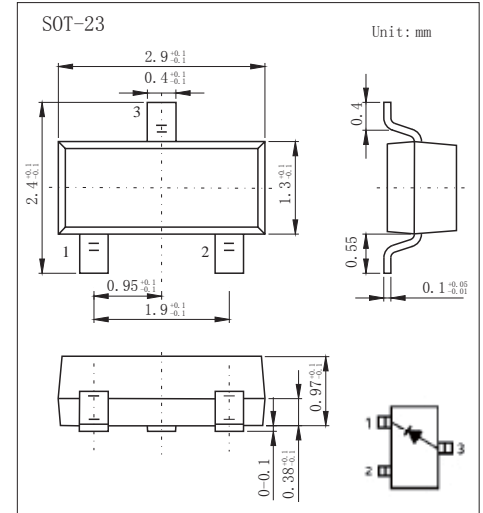
**VOLTAGE RANGE: 85V**  
**PEAK PULSE POWER: 150mW**

### 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



## 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	$V_{F1}$		0.61		V	$I_F=1\text{mA}$
	$V_{F2}$		0.74		V	$I_F=10\text{mA}$
	$V_{F3}$		0.92	1.2	V	$I_F=100\text{mA}$
Reverse current	$I_{R1}$			0.1	$\mu\text{A}$	$V_R=30\text{V}$
	$I_{R2}$			0.5	$\mu\text{A}$	$V_R=80\text{V}$
Capacitance between terminals	$C_T$		2.2	4.0	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: D3•**



# RATINGS AND CHARACTERISTIC CURVES

