

## Small Signal Switching Diode

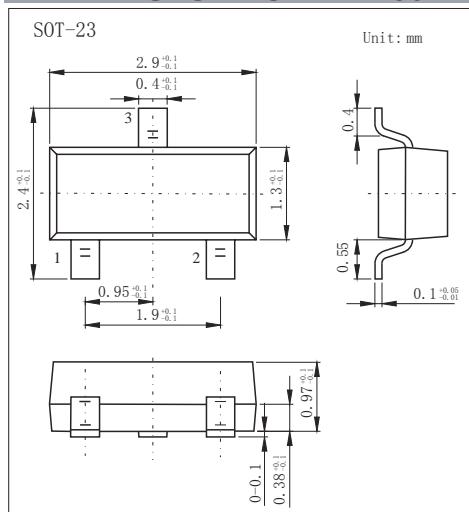
### FEATURES

- 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°C unless otherwise specified)

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	uA	$V_R=30V$
	$I_{R2}$			0.5	uA	$V_R=80V$
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	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R$

MARKING: F3

# RATINGS AND CHARACTERISTIC CURVES

