

Small Signal Switching Diodes

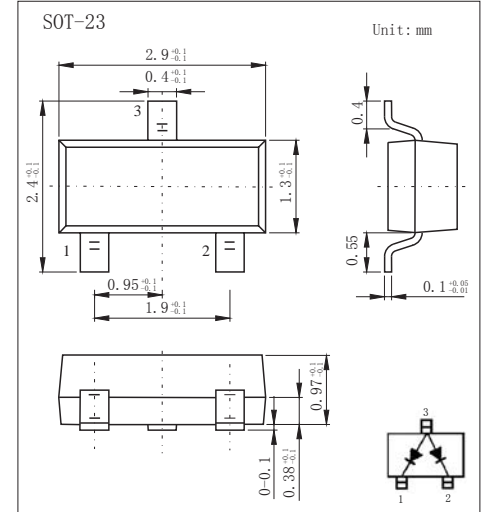
VOLTAGE RANGE: 85V
PEAK PULSE POWER: 150mW

FEATURES

- Low forward voltage $V_F(3)=0.92V(\text{typ})$.
- Fast switching.
- Fast reverse recovery time: $t_{rr}=1.6\text{ns}(\text{typ})$

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)

Characteristic	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	85	V
DC Reverse Voltage	V_R	80	V
Forward current(max)	I_{FM}	300	mA
Surge current (10ms)	I_{FSM}	2	A
Forward Output current	I_o	100	mA
Power Dissipation	P_d	150	mW
Operating Junction Temperature Range	T_j	125	°C
Storage Temperature Range	T_{STG}	-55 to +125	°C

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

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	80	-	-	V	$I_R=100\mu\text{A}$
Forward Voltage	V_F	-	0.61 0.74 0.92	1.2	V	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=100\text{mA}$
Reverse Leakage Current	I_R	-	-	0.1 0.5	μA	$V_R=30\text{V}$ $V_R=80\text{V}$
Total Capacitance	C_T	-	2.2	4.0	pF	$V_R=0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	-	1.6	4.0	ns	$I_F=I_R=10\text{mA}, t_{rr}=0.1 \cdot I_R$

Marking: A3

RATINGS AND CHARACTERISTIC CURVES

