

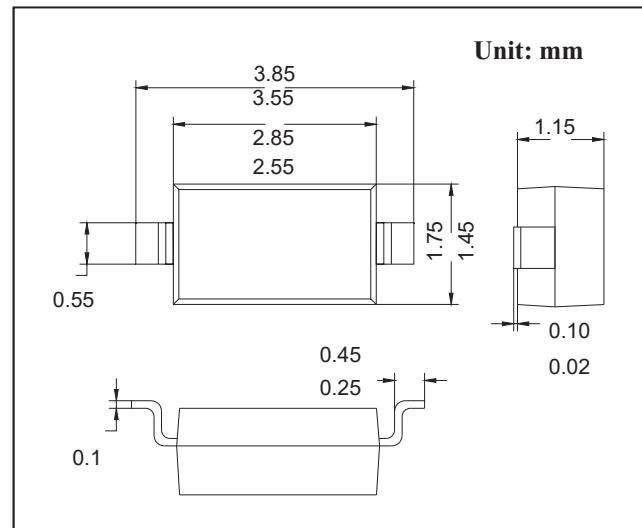
## SOD123 Small Signal Switching Diodes

### FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conduc tance

### MECHANICAL DATA

- Case: SOD-123 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
<b>Non-Repetitive Peak Reverse Voltage</b>	$V_{RM}$	100	V
<b>Peak Repetitive Peak Reverse Voltage</b>	$V_{RRM}$		
<b>Working Peak Reverse Voltage</b>	$V_{RWM}$	100	V
<b>DC Blocking Voltage</b>	$V_R$		
<b>RMS Reverse Voltage</b>	$V_{R(RMS)}$	71	V
<b>Forward Continuous Current</b>	$I_{FM}$	300	mA
<b>Average Rectified Output Current</b>	$I_O$	150	mA
<b>Non-Repetitive Peak Forward Surge Current @t=8.3ms</b>	$I_{FSM}$	2.0	A
<b>Power Dissipation</b>	$P_d$	400	mW
<b>Thermal Resistance from Junction to Ambient(Note 1)</b>	$R_{\theta JA}$	250	°C/W
<b>Junction Temperature</b>	$T_j$	150	°C
<b>Storage Temperature</b>	$T_{STG}$	-55~+150	°C

### Electrical Specification (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
<b>Forward voltage</b>	$V_{F1}$			0.715	V	$I_F=1\text{mA}$
	$V_{F2}$			0.855	V	$I_F=10\text{mA}$
	$V_{F3}$			1.0	V	$I_F=50\text{mA}$
	$V_{F4}$			1.25	V	$I_F=150\text{mA}$
<b>Reverse current</b>	$I_{R1}$			1	$\mu\text{A}$	$V_R=75\text{V}$
	$I_{R2}$			25	nA	$V_R=20\text{V}$
<b>Capacitance between terminals</b>	$C_T$			2	pF	$V_R=0\text{V}, f=1\text{MHz}$
<b>Reverse recovery time</b>	$t_{rr}$			4	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

## RATINGS AND CHARACTERISTIC CURVES

