

## 350mW SOD- 123 Fast Switching Diode

### Features

- 100nS; Fast switching device (TRR <100nS)
- 350mW; Power dissipation of 350mW
- High stability and high reliability
- Low reverse leakage

### Mechanical Data

- SOD-123 Small outline plastic package
- Polarity: color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting position: any



RoHS  
COMPLIANT



Marking: 35XT SOD-123



### Maximum Ratings & Thermal Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameters	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	350	V
Peak reverse voltage	V <sub>RM</sub>	350	V
Power dissipation	P <sub>D</sub>	350	mW
Operating junction temperature	T <sub>j</sub>	150	°C
Storage temperature range	T <sub>STG</sub>	-65-+150	°C
Typical thermal resistance	R <sub>θJA</sub> R <sub>θJC</sub>	250 5	°C/W
Average rectified current	I <sub>O</sub>	150	mA
Non-repetitive peak forward current	I <sub>FM</sub>	300	mA
Peak forward surge current @tp=1us; TA=25 °C	I <sub>FSM</sub>	1.0	A
Working Inverse voltage	W <sub>IV</sub>	75	V

Valid provided that electrodes are kept at ambient temperature.

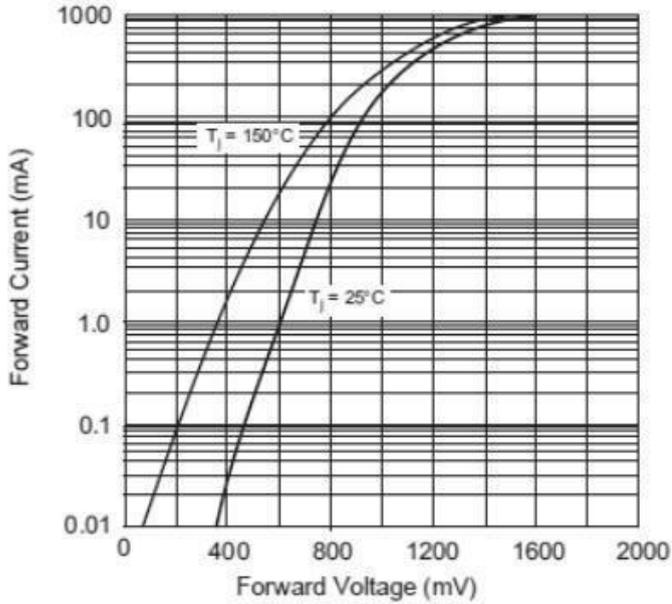
### Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Reverse voltage	VRB	IR=100uA	350		V
Reverse leakage current	IR	VR=240V		100	nA
Forward voltage	VF	IF=20mA		0.87	V
		IF=100mA		1.00	
		IF=200mA		1.25	
Reverse recovery time	TRR	IF =30mA IR = 30mA,		100	nS
		Irr=3mA			
		RL=100Ω			
Capacitance	C	VR=0V, f=1MHZ		5	pF

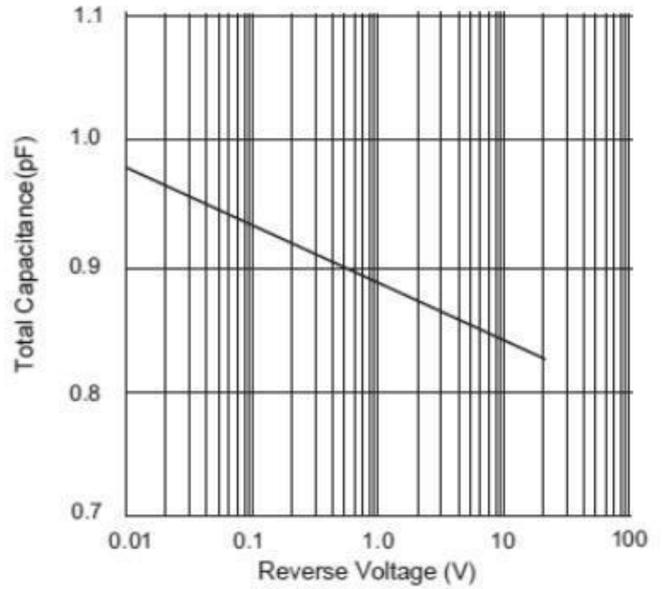
## Ratings and Characteristics Curves

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

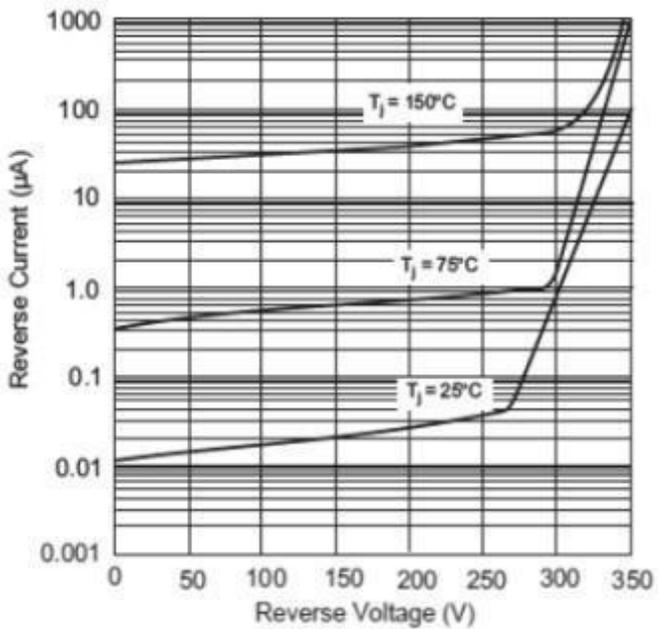
**Forward characteristics**



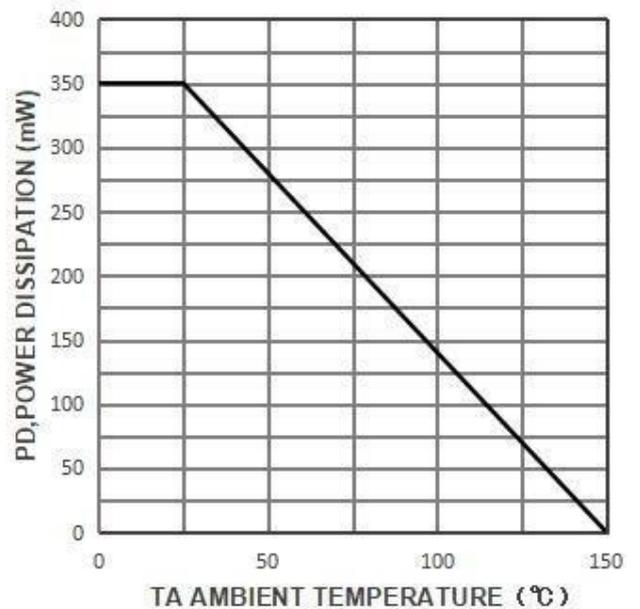
**Capacitance characteristics**



**Reverse Characteristics**

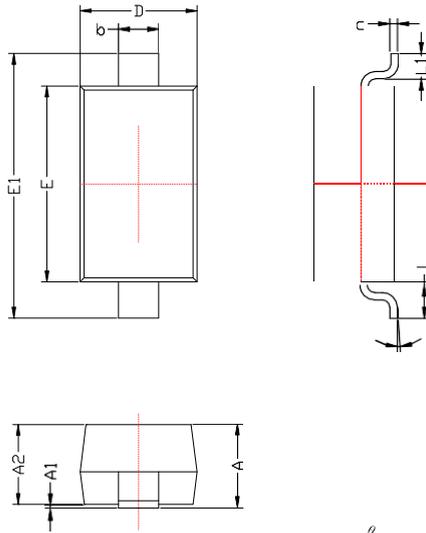


**Power Derating Curve**



## Package Outline Dimensions

millimeters



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°

## Revision History

Document Version	Date of release	Description of changes
Rev.A	2015.07.21	First issue

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