

500mW SOD- 123 Fast Switching Diode

Features

- 4nS; Fast Switching device (TRR<4nS)
- 400mW; Power dissipation of 400mW
- High stability and high reliability
- Low reverse leakage



RoHS
COMPLIANT



Marking: 5D

SOD-123

Mechanical Data

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

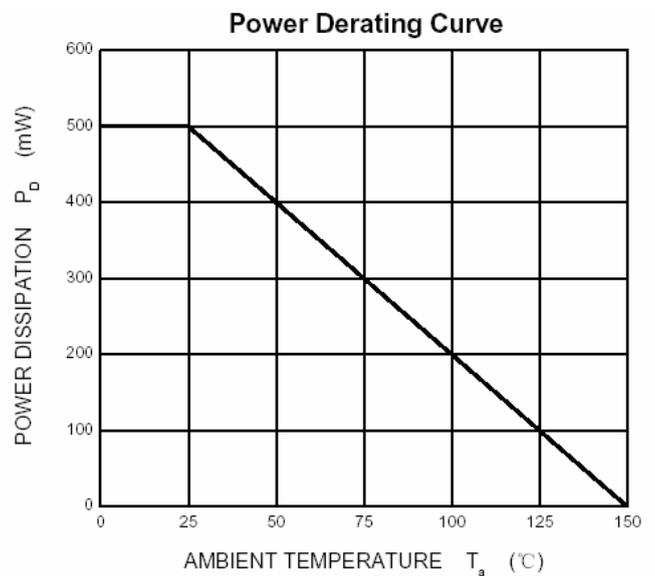
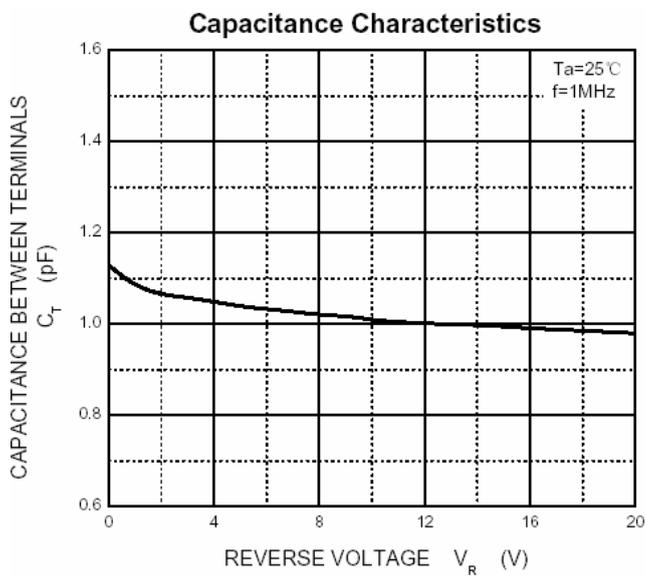
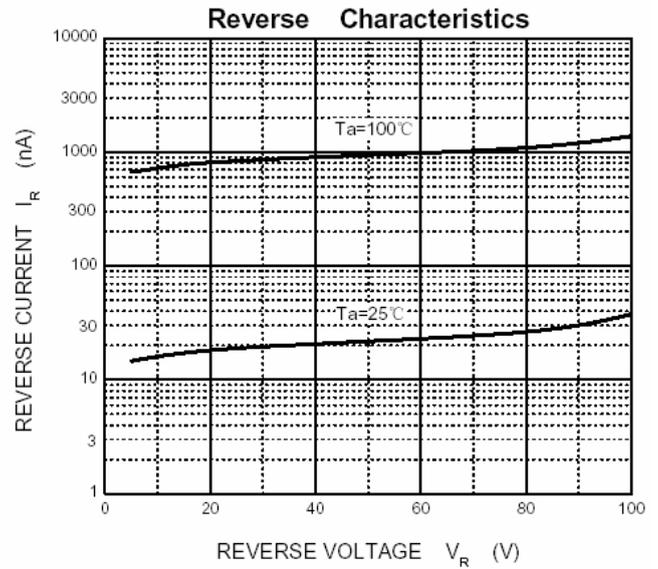
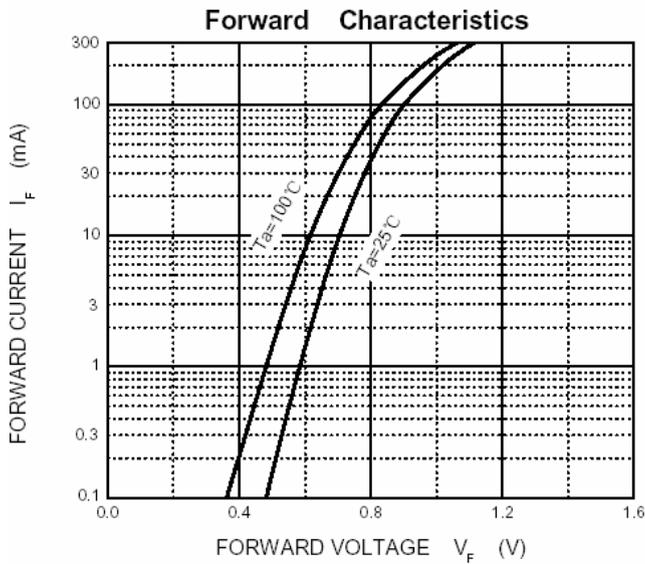
Maximum Ratings & Thermal Characteristics (T _A =25°C unless otherwise noted)				
Parameters	Symbol	Value	Unit	
Peak reverse voltage	V _{RM}	100	V	
Power dissipation	P _d	400	mW	
Operating junction temperature	T _j	150	°C	
Storage temperature range	T _{STG}	-65-+150	°C	
Working Inverse voltage	W _{IV}	75	V	
Average rectified forward current	I _{F(V)}	200	mA	
Non-repetitive peak forward current	I _{FM}	300	mA	
Peak forward surge current	I _{FSM}	@tp=1s	1.0	A
@tp=1us; TA=25 °C		@tp=1us	2.0	

Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics (T _A =25°C unless otherwise noted)					
Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Reverse voltage	B _V	IR=100uA	100		V
		IR=5uA	75		
Reverse leakage current	I _R	VR=20V		25	nA
		VR=75V		5	uA
Forward voltage	V _F	IF=10mA		1.00	V
Reverse recovery time	T _{RR}	IF =30mA IR = 30mA,		4	nS
		Irr=3mA			
		RL=100Ω			
Capacitance	C	VR=0V, f=1MHZ		5	pF

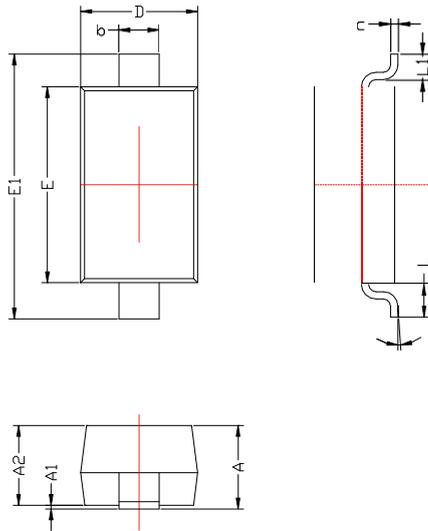
Ratings and Characteristics Curves

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



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	2012.08.18	First issue

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