

# 500mW SOD-123 Fast Switching Diode

#### **Features**

- 4.0nS; Fast switching device (TRR <4.0 nS)
- 500mW; power d issipation of 500mW
- High stability and high reliability
- Low reverse leakage

#### **Mechanical Data**

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



Marking: T5 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>	75	V		
Peak reverse voltage	Vrm	100	V		
Power dissipation	PD	500	mW		
Operating junction temperature	TJ	150	°C		
Storage temperature range	Τ <sub>S</sub>	-55-+150	°C		
Working Inverse voltage	W <sub>IV</sub>	75	V		
Average rectified current	Ι <sub>ο</sub>	200	mA		
Non-repetitive peak forward current	IFM	500	mA		
Peak forward surge current @tp=1us; TA=25 $^{\circ}$ C	IFSM	2.0	A		

Valid provided that electrodes are kept at ambient temperature.

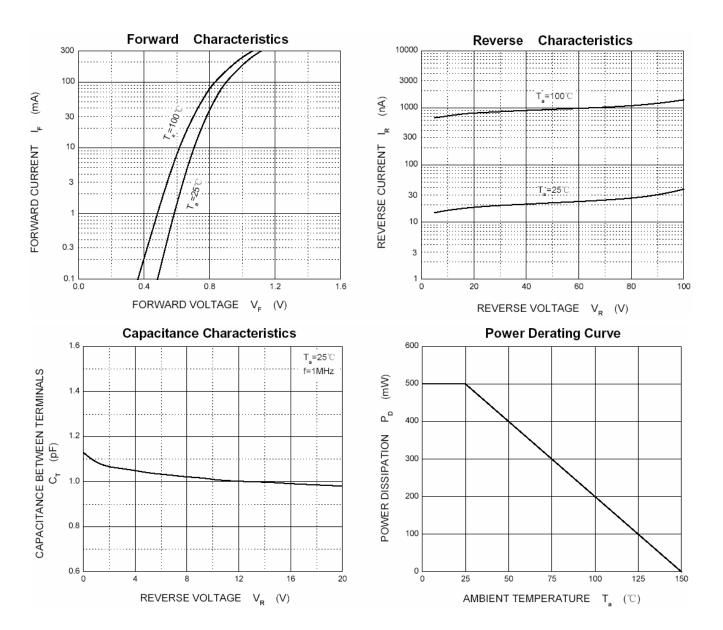
Electrical Characteristics (T <sub>A</sub> =25°C unless otherwise noted)					
Parameter		Test Condition	Limits		
	Symbols		Min	Max	Unit
Breakdown Voltage	Bv	IR=100uA	100		V
		IR=5uA	75		
Reverse Leakage Current	IR	VR=20V		25	nA
		VR=75V		2.5	uA
Forward Voltage		IF=5mA	0.62	0.72	V
	VF	IF=10mA		0.855	
	VF	IF=100mA		1.00	
		IF=150mA		1.25	
Reverse Recovery Time		IF = 10ma IR= 10mA,			nS
	TRR	Irr=0.1mA		4	
		RL=100Ω			
Capacitance	Cj	VR=0V, f=1MHZ		4	pF



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### **Ratings and Characteristics Curves**

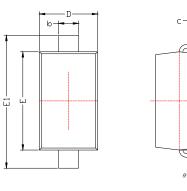
(TA = 25°C unless otherwise noted)

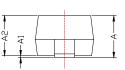




# Package Outline Dimensions

millimeters





SYMDDI	DIMENSIONS		
SYMBOL	MIN.	MAX.	
А	1.050	1.250	
A1	0.000	0.100	
A2	1.050	1.150	
b	0.450	0.650	
$\subset$	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	2014.04.01	First issue



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