SWITCHING 200mW SOD123 Fast Switching Diode ROHS

SOD-523

MARKING: 1N4148WT T4
1N4448WT T5
1N914BWT T6

Features

- Fast Switching Device (TRR <4.0 nS)
- Power Dissipation of 200mW
- High Stability and High Reliability
- Low reverse leakage

Mechanical Data

- SOD-523 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any

Maximum Ratings & Thermal Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Power Dissipation	Pd	500	mW
Operating junction temperature	Tj	150	℃
Storage temperature range	T_{STG}	-65-+150	℃
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	℃/W
Average Rectified Current	I_O	150	mA
Non-repetitive Peak Forward Current	I_{FM}	300	mA
Peak Forward Surge Current @tp=1us; TA=25℃	I_{FSM}	2.0	A

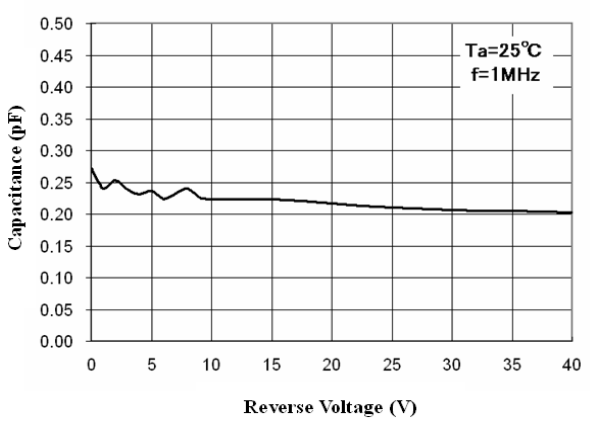
Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics

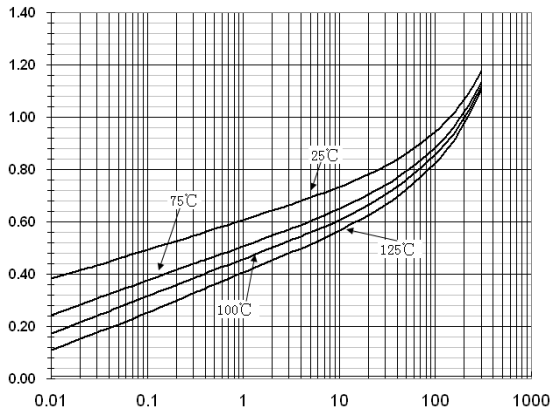
(Ratings at 25℃ ambient temperature unless otherwise specified).

Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
BV	Breakdown Voltage	IR=100uA	100		V
		IR=5uA	75		
IR	Reverse Leakage Current	VR=20V	---	25	nA
		VR=75	---	5	uA
VF	Forward Voltage 1N4448WT,IN914BWT	IF=5mA	0.62	0.72	V
	Forward Voltage 1N4148WT	IF=10mA	---	1.00	
	Forward Voltage 1N4448WT,IN914BWT	IF=100mA	---	1.25	
TRR	Reverse Recovery Time	IF = IR = 10mA, Irr=0.1XIR RL=100Ω	---	4	nS
C	Capacitance	VR=0V, f=1MHZ	---	4	pF

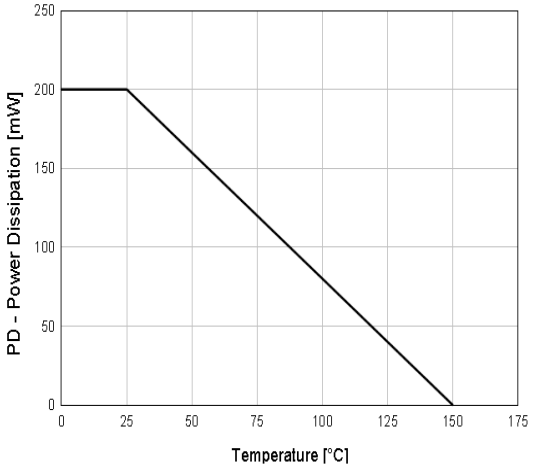
Total Capacitance



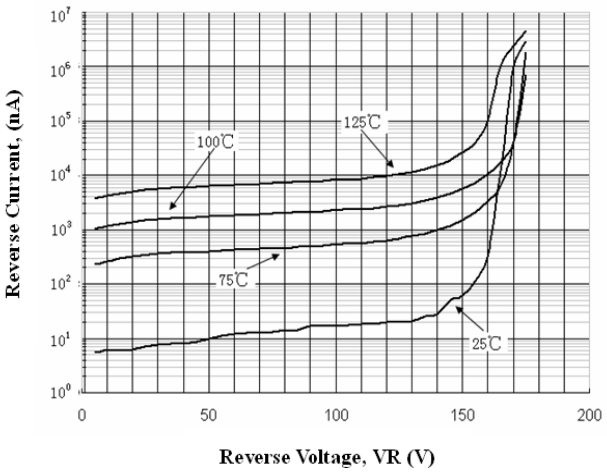
Forward Voltage vs Ambient Temperature



Power Derating Curve



Reverse Current vs Reverse VoltageReverse



Flat Lead SOD-523 Package Outline