

**SOD-523**


MARKING: 1N4148WT E1  
 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
- EpoxyUL: 94V-0
- Mounting Position: Any

**Maximum Ratings & Thermal Characteristics**

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Reverse Voltage	$V_R$	75	V
Peak Reverse Voltage	$V_{RM}$	100	V
Power Dissipation	$P_d$	500	mW
Operating junction temperature	$T_j$	150	°C
Storage temperature range	$T_{STG}$	-65-+150	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	°C/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°C	$I_{FSM}$	2.0	A

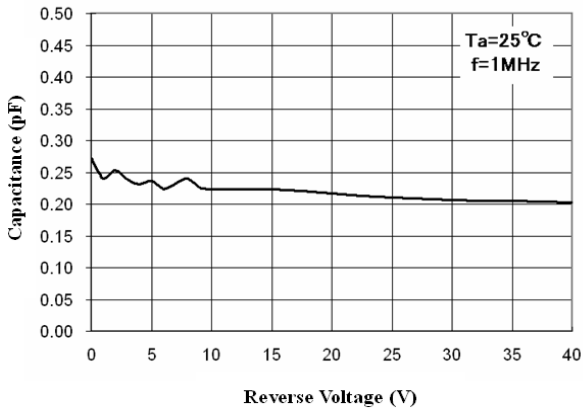
Valid provided that electrodes are kept at ambient temperature.

**Electrical Characteristics**

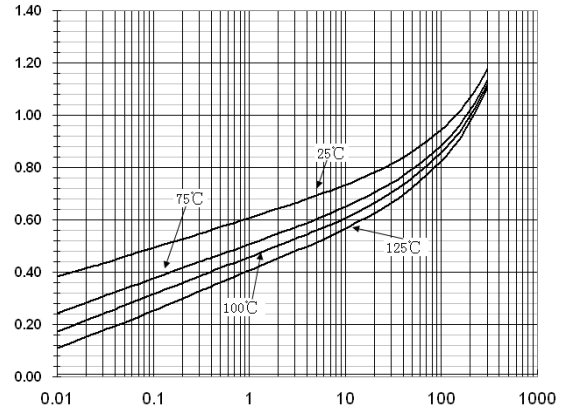
(Ratings at 25°C ambient temperature unless otherwise specified).

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
		1N4148WT IF=10mA	---	1.00	
		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

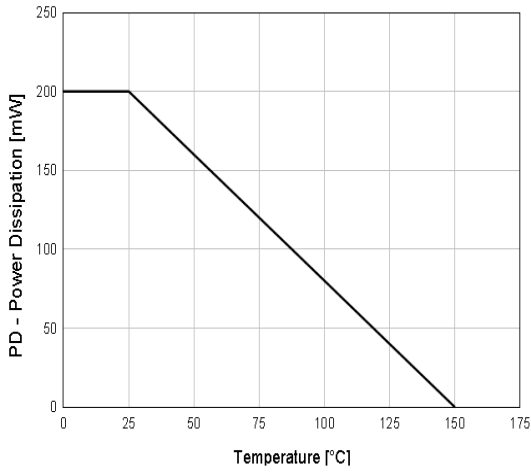
**Total Capacitance**



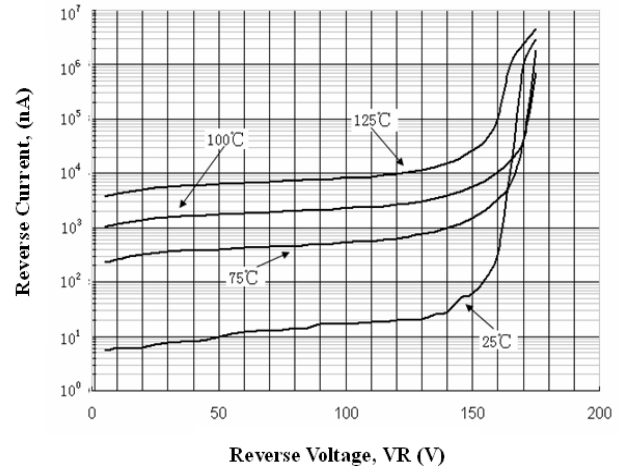
**Forward Voltage vs Ambient Temperature**



**Power Derating Curve**



**Reverse Current vs Reverse Voltage**



**Flat Lead SOD-523 Package Outline**

