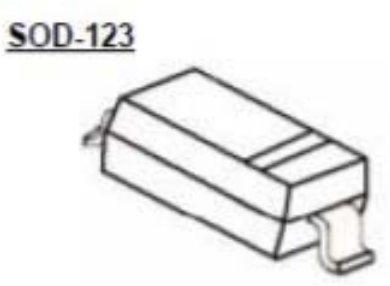
500mW SOD-123 Fast Switching Diode

1N4148W

Features



Fast Switching Device (TRR <4.0 nS)

Power Dissipation of 500mW

High Stability and High Reliability

Low reverse leakage

Mechanical Data

Cases :SOD-123 Small Outline Plastic Package

Polarity: Color band denotes cathode end

Mounting Position: Any

MARKING: T4Y

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	Ts	-65-+150	℃
Working Inverse Voltage	W_{IV}	75	V
Average Rectified Current	Io	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	
B_V	Breakdown Voltage	IR=100uA IR=5uA	100 75	- -	V
I_R	Reverse Leakage Current	VR=20V VR=75	- -	25 5	nA uA
V_F	Forward Voltage	IF=10mA IF=100mA	- -	1.0 1.0	V
T_{RR}	Reverse Recovery Time	IF= 10mA, IR=60mA RL=100Ω IRR=1mA	-	4	nS
C	Capacitance	VR=0V, f=1MHZ	-	4	pF

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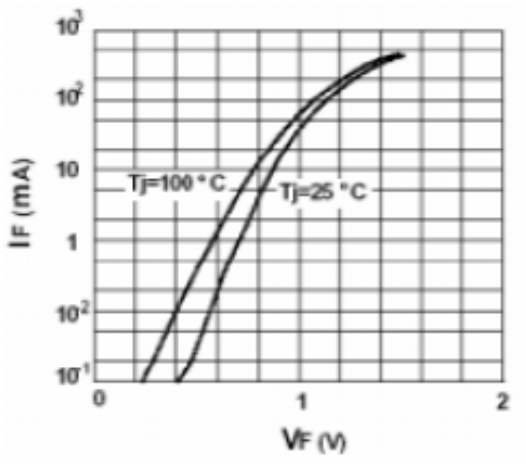
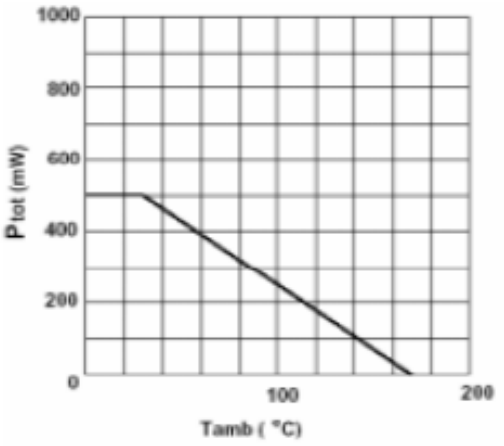
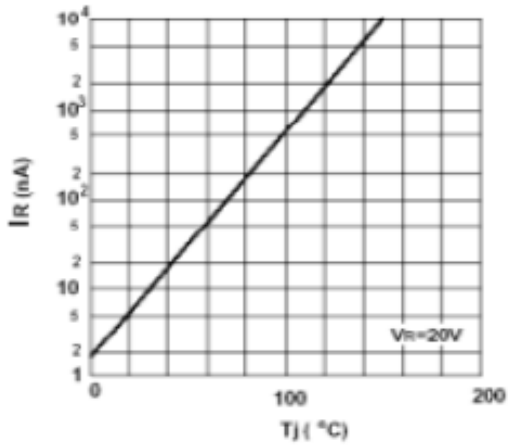
Forward characteristics



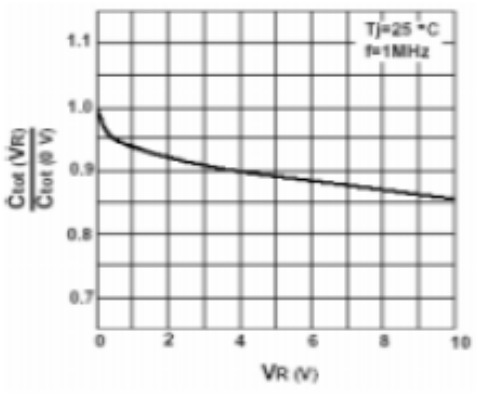
Admissible power dissipation versus ambient temperature



Leakage current versus junction temperature



Reverse capacitance VS. reverse boltage



Amissible repetitive peak forward current VS. pulse duration