

Kingtronics®

1N4148W

500mW SOD-123 Fast Switching Diode

FEATURES

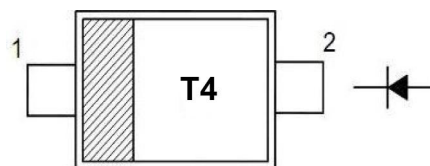
- Fast switching for high efficiency
- Fast Switching Device (TRR <4.0 nS)
- Power Dissipation of 500mW
- High Stability and High Reliability
- Low leakage
- High temperature soldering guaranteed: 250°C/10 second at terminals

MECHANICAL DATA

- Flat Lead SOD-123 Small Outline Plastic Package
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.0006 ounce, 0.017 gram

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Marking Code: " T4"

Simplified outline SOD-123 and symbol

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

PARAMETER	SYMBOL	VALUE	UNIT
Reverse Voltage	VR	75	V
Peak Reverse Voltage	VRM	100	V
Power Dissipation	Pd	500	mW
Operating junction temperature	Tj	150	°C
Storage temperature range	Ts	-65-150	°C
Working Inverse Voltage	WIV	75	V
Average Rectified Current	IO	150	mA
Non-repetitive Peak Forward Current	IFM	300	mA
Peak Forward Surge Current @tp=1us; TA=25°C	IFSM	2	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 IR=5uA	100 75		V
IR	Reverse Leakage Current	VR=20V VR=75	---	25 5	nA µA
VF	Forward Voltage	IF=10mA IF=100mA	---	1 1	V
TRR	Reverse Recovery Time	IF= 10mA, IR=60mA RL=100Ω IRR=1mA	---	4	nS
C	Capacitance	VR=0V, f=1MHZ	---	4	pF

Kingtronics® International Company

Website: www.kingtronics.com

Email: info@kingtronics.com

Tel: (852) 8106 7033

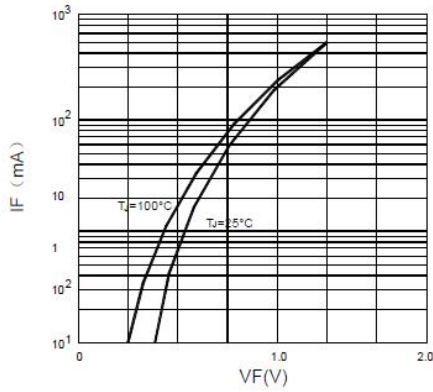
Fax: (852) 8106 7099

Kingtronics®

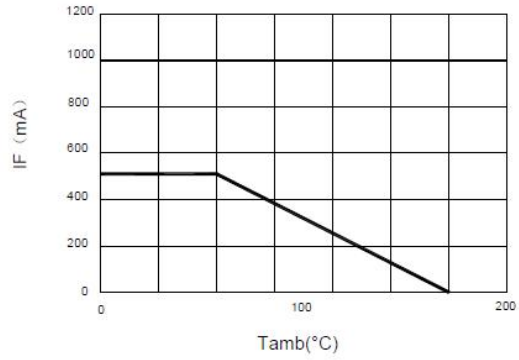
1N4148W

500mW SOD-123 Fast Switching Diode

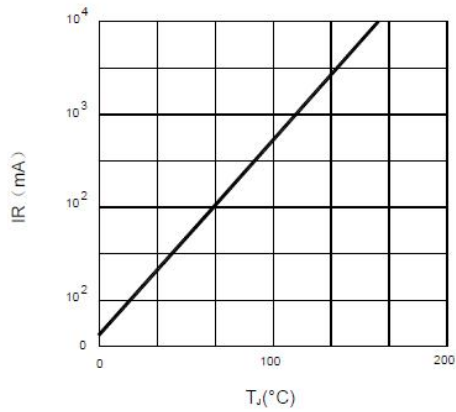
Forward characteristics



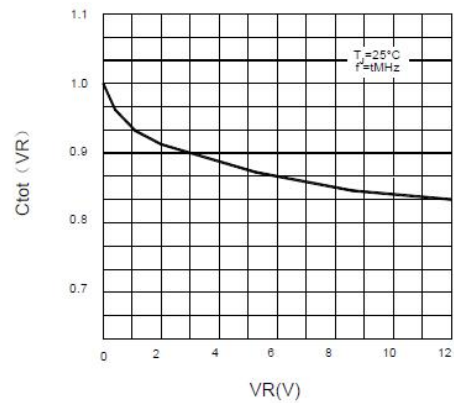
Admissible power dissipation versus ambient temperature



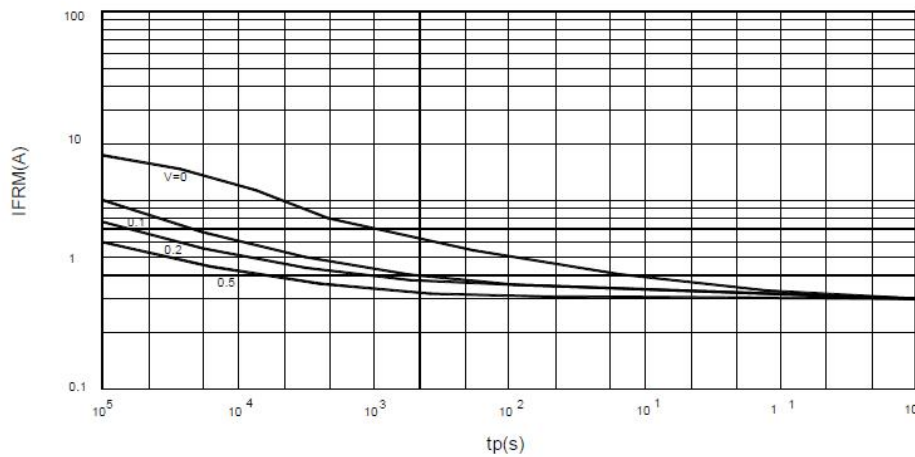
Leakage current versus junction temperature



Reverse capacitance VS. reverse voltage



Admissible repetitive peak forward current VS. pulse duration



Kingtronics® International Company

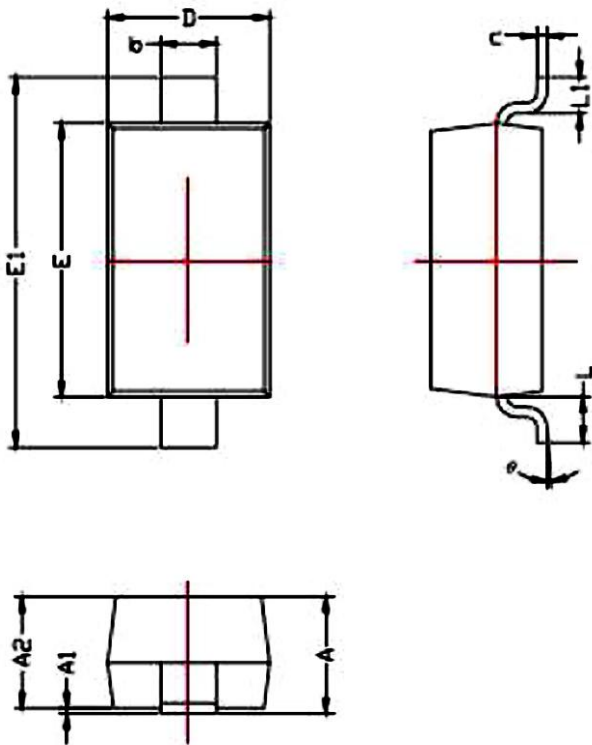
Kingtronics®

1N4148W

500mW SOD-123 Fast
Switching Diode

SOD-123 PACKAGE OUTLINE

Plastic surface mounted package



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°

Note: Specifications are subject to change without notice.

Kingtronics® International Company

Website: www.kingtronics.com Email: info@kingtronics.com Tel: (852) 8106 7033 Fax: (852) 8106 7099