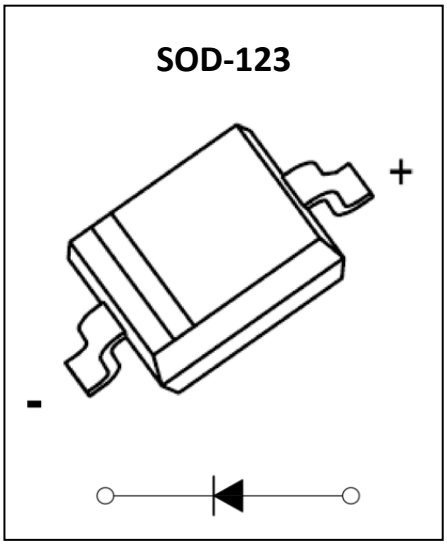
1N4148W

100V-0.15A Fast Switching Diodes

1N4148W Fast Switching Diodes



Feature

- Fast Switching Speed
- High Conductance
- For General Purpose Switching Applications

MARKING:T4

ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

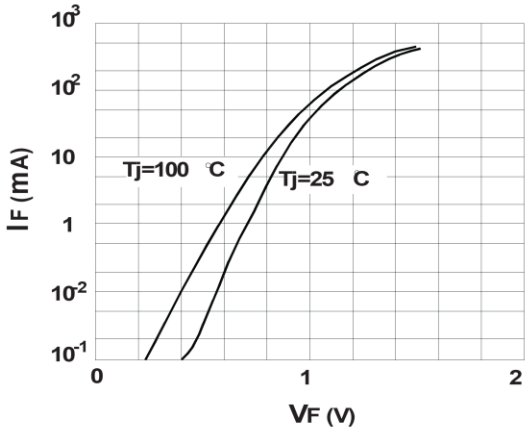
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	71	V
Mean rectifying current	I_O	0.15	A
Forward Continuous Current	I_{FM}	0.3	A
Non-repetitive Peak Forward Surge Current @ t=1 us	I_{FSM}	2	A
Power Dissipation	P_D	0.35	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 ~ +150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)

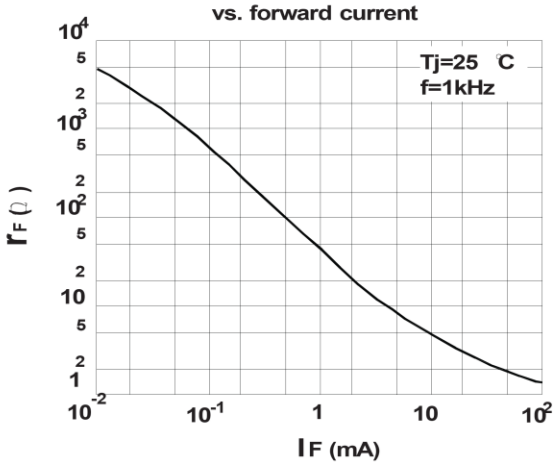
Parameter	Symbol	Test Condition	Min	Max	Unit
Forward Voltage	V_F	I_F =1mA		0.715	V
		I_F =10mA		0.855	V
		I_F =50mA		1.0	V
		I_F =150mA		1.25	V
Reverse Current	I_R	V_R =20V		25	nA
		V_R =75V		1	μA
Diode Capacitance	C_D	V_R=0V, f=1MHz		2	pF
Reverse Recovery Time	trr	I_F=I_R=10mA，I_{rr}=0.1*I_R, R_L=100Ω		4	ns

Typical Electrical and Thermal Characteristics

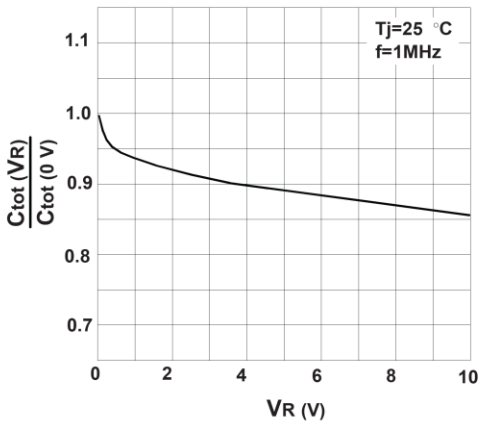
Forward characteristics



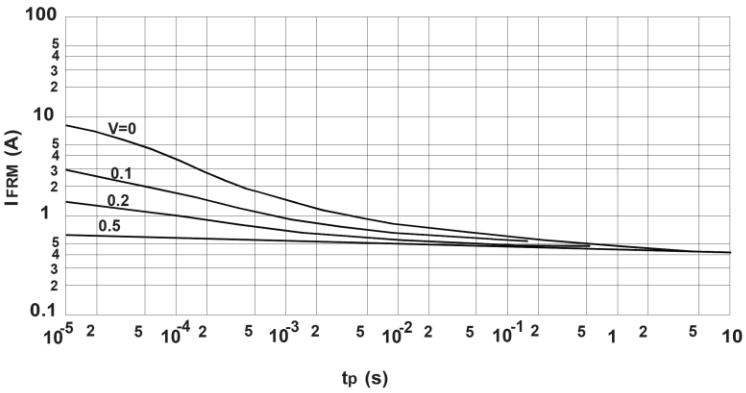
Dynamic forward resistance vs. forward current



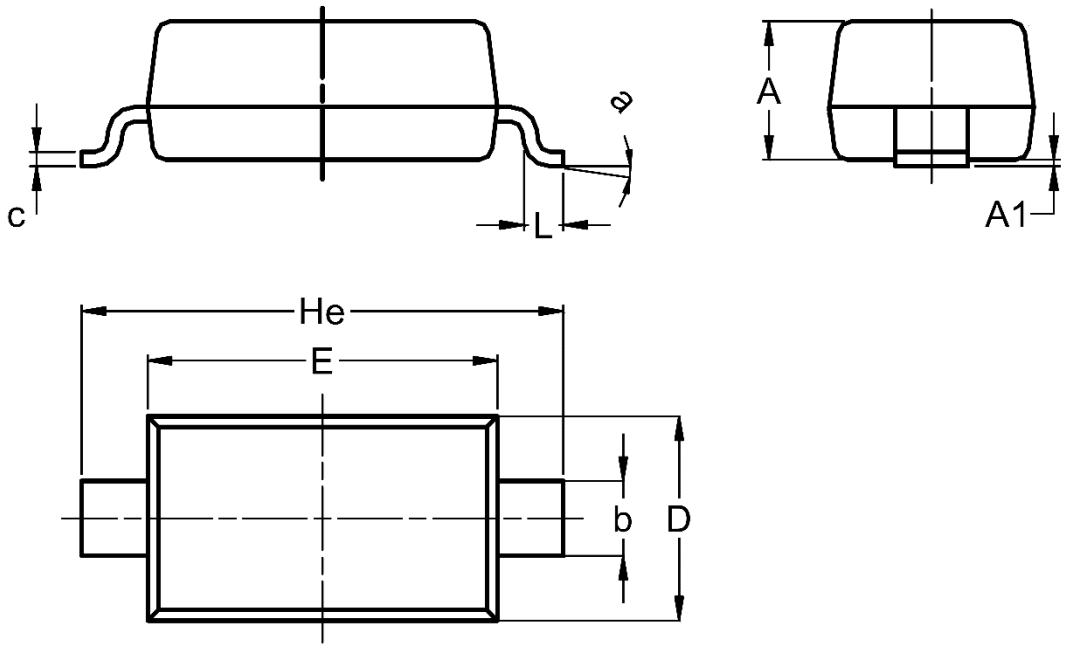
Reverse capacitance vs. reverse voltage



Amissible repetitive peak forward current vs. pulse duration



SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.950	1.350	0.037	0.053
A1	0	0.100	0	0.004
c	0.090	0.120	0.004	0.005
D	1.500	1.700	0.059	0.067
b	0.450	0.650	0.018	0.026
He	3.450	3.850	0.136	0.152
E	2.550	2.800	0.100	0.110
L	0.200	0.400	0.008	0.016
a	0°	8°	0°	8°

Attention：

- GreenPower Electronics reserves the right to improve product design function and reliability without notice.
- Any and all semiconductor products have certain probability to fail or malfunction, which may result in personal injury, death or property damage. Customer are solely responsible for providing adequate safe measures when design their systems.
- GreenPower Electronics products belong to consumer electronics or other civilian electronic products.