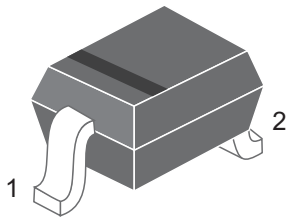
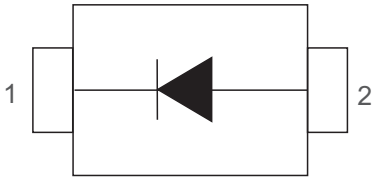
FAST SWITCHING DIODE

SOD-323



Pin Configuration



Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications
- High conductance

Mechanical Data

- **Case:** Molded plastic body
- **Terminals:** Plated leads solderable per MIL-STD-750,Method 2026
- **Polarity:** Polarity symbols marked on case

Device Marking And Ordering Information

Device	Marking	Shipping
1N4148WS	T4	3000pcs/Tape&Reel

Maximum & Thermal Characteristics Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Peak repetitive peak reverse voltage Working peak reverse voltage DC Blocking voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse voltage	$V_{R(RMS)}$	53	V
Forward continuous current	I_{FM}	250	mA
Peak forward current @=1.0μs	I_{FSM}	2.0	A
Thermal resistance junction to ambient	$R_{\theta JA}$	300	°C/W
Junction temperature	T_J	-55~+125	°C
Storage temperature	T_{STG}	-55~+125	°C
Non-Repetitive peak reverse voltage	V_{RM}	100	V

Electrical Characteristics(T_A=25°C unless otherwise specified)

Parameter	Symbol	Min.	Max.	Units
Reverse Current (V = 20Vdc) (V_R = 75Vdc)	I_R		0.025 5	μA μA
Forward Voltage (IF = 10 mAdc)	V_F		1.0	V
Reverse Recovery Time (IF=10mA.IR=60mA,IRR=1mA,RL=100Ω)	t_{rr}		4	ns
Capacitance Between Terminals	C_T		4	pF

Characteristic Curves (T_A=25°C unless otherwise noted)

Fig.1 Forward Voltage vs Ambient Temperature

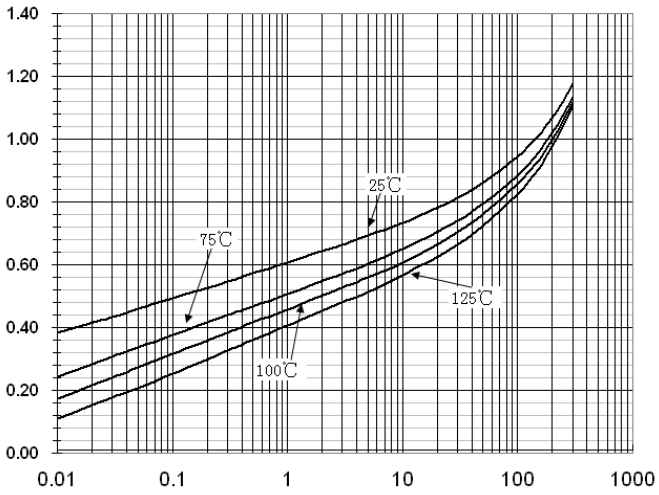


Fig.2 Total Capacitance

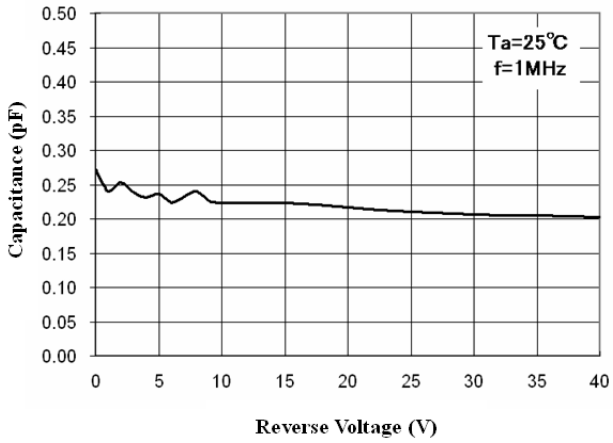
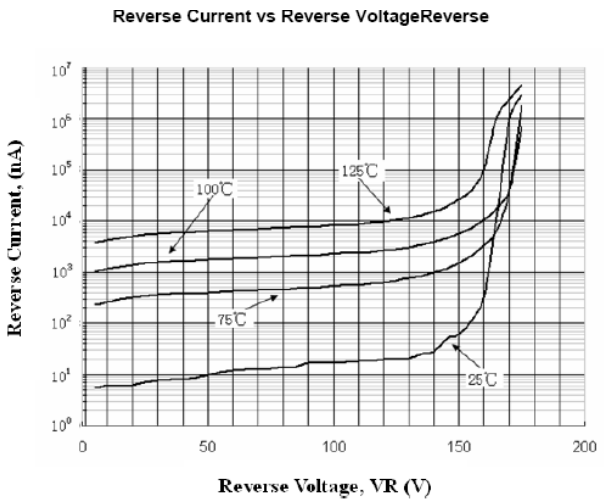
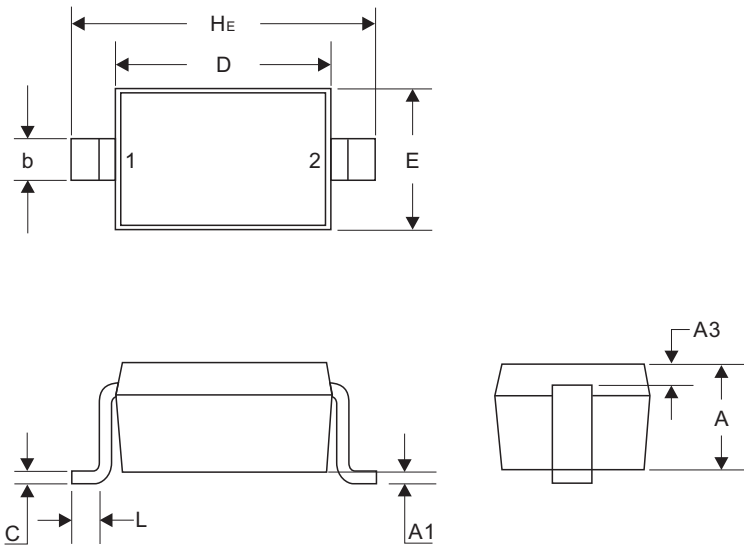


Fig.3 Reverse Current vs Ambient Temperature



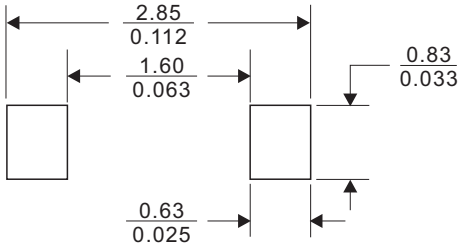
Dimensions(SOD-323)

SOD-323



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.80	1.10	0.031	0.043
A1	0.00	0.20	0.000	0.008
b	0.25	0.40	0.010	0.016
C	0.08	0.177	0.003	0.007
D	1.40	1.80	0.055	0.070
E	1.15	1.40	0.045	0.055
L	0.08		0.003	
HE	2.30	2.75	0.090	0.108

Recommended Mounting Pad Layout



Dimensions in (millimeters / inches)