1N4148WT

SOD-523 Plastic-Encapsulate Switching Diode

Switching Diodes

FEATURES

- For surface mounted applications
- Fast reverse recovery time
- Ideal for automated placement

Maximum Ratings at 25 °C

Parameter	Symbols	1N4148WT	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}		V
Working Peak Reverse Voltage	V_{RWM}		V
Average Rectified Output Current	I_O	150	mA
Non-repetitive Peak Forward Surge Current@t= 8.3ms	I_{FSM}	0.8	A
Power Dissipation	P_D	150	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbols	Test conditions	Min	Typ	Max	Units
Reverse voltage	$V_{(BR)}$	I_R= 1uA	75			V
Reverse current	I_R	V_R= 75V			1	uA
		V_R= 20V			25	nA
Forward voltage	V_F	I_F= 1 m A			0.715	V
		I_F= 10 m A			0.855	V
		I_F= 50 m A			1	V
		I_F= 150 m A			1.25	V
Total capacitance	C_{tot}	V_R=0V,f=1MHz			2	pF
Reverse recovery time	t_{rr}	I_F=I_R=10mA,I_{rr}=0.1*I_R,R_L=100Ω			4	ns

Typical Characteristics

Fig.1 Power Derating Curve

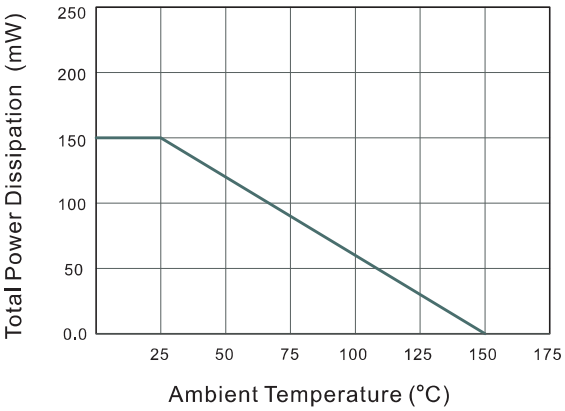


Fig.2 Typical Reverse Characteristics

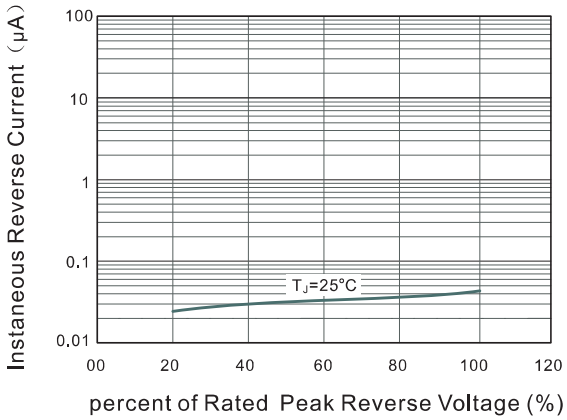


Fig.3 Typical Instaneous Forward Characteristics

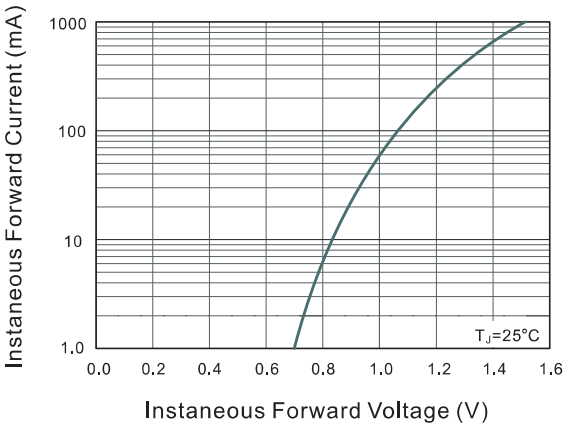
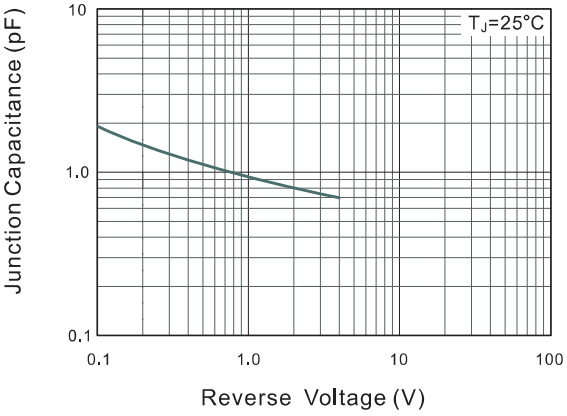
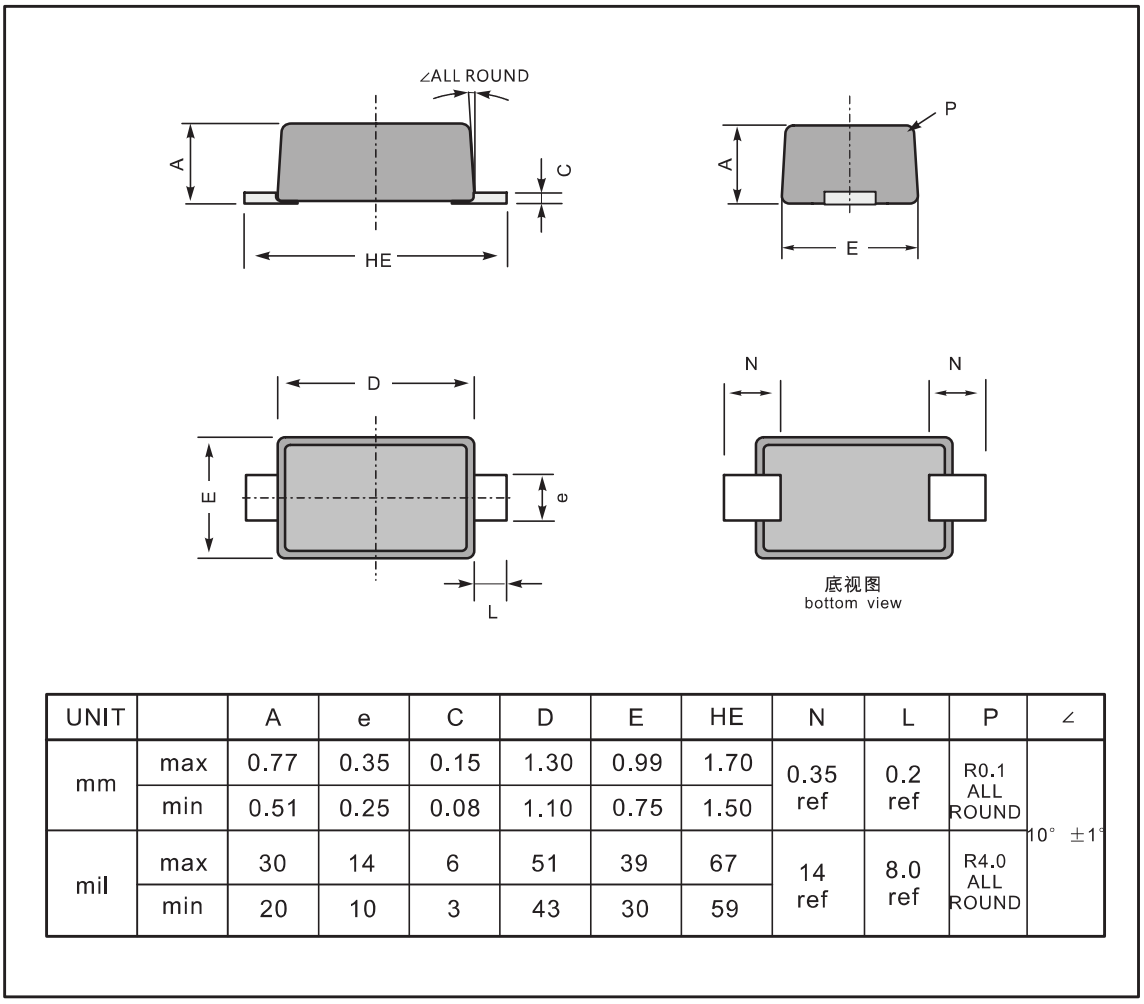


Fig.4 Typical Junction Capacitance



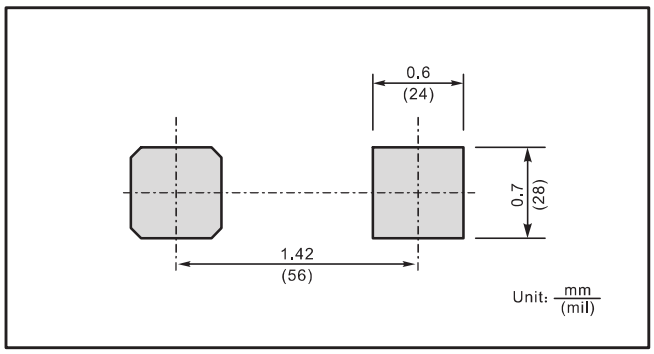
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads SOD-523



UNIT		A	e	C	D	E	HE	N	L	P	∠
mm	max	0.77	0.35	0.15	1.30	0.99	1.70	0.35 ref	0.2 ref	R0.1 ALL ROUND	10° ±1°
	min	0.51	0.25	0.08	1.10	0.75	1.50				
mil	max	30	14	6	51	39	67	14 ref	8.0 ref	R4.0 ALL ROUND	
	min	20	10	3	43	30	59				

The recommended mounting pad size



Marking

Type number	Marking code
1N4148WT	T4