

1N4148WT Fast Switching Diodes

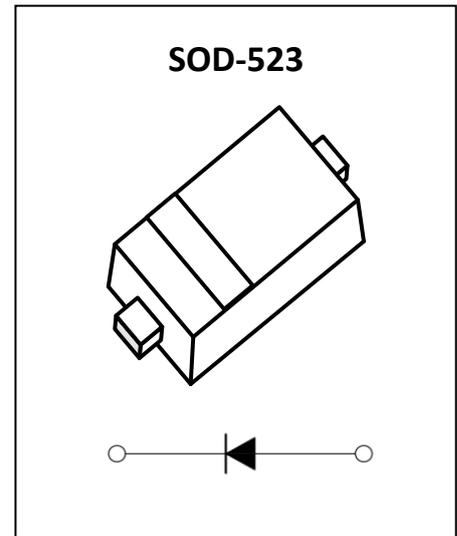
Feature

- V_R 75V
- I_{FAV} 150mA

Application

- Extreme fast switches

MARKING:



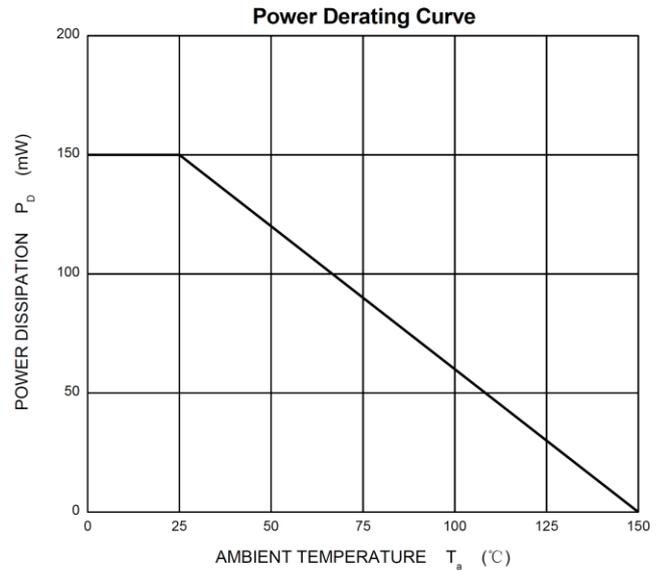
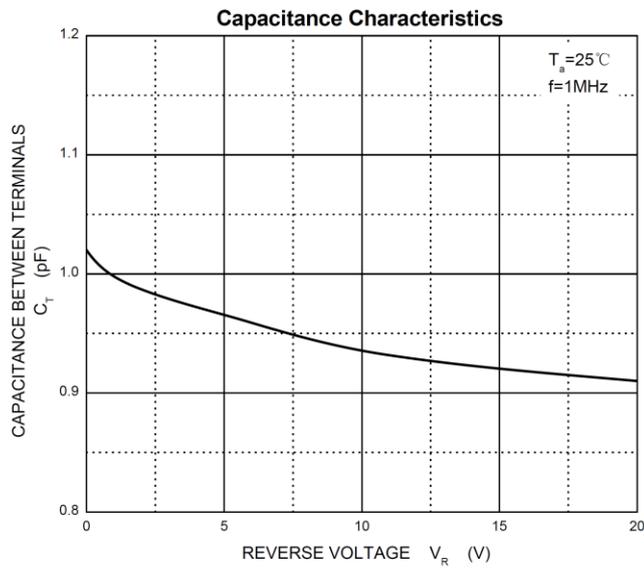
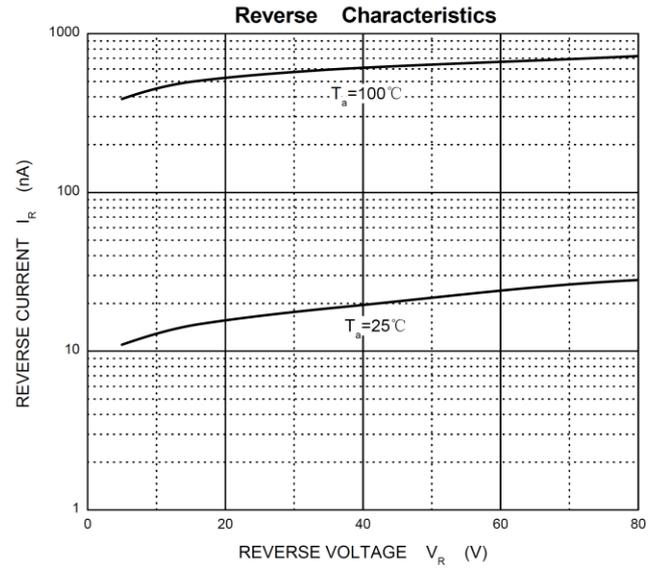
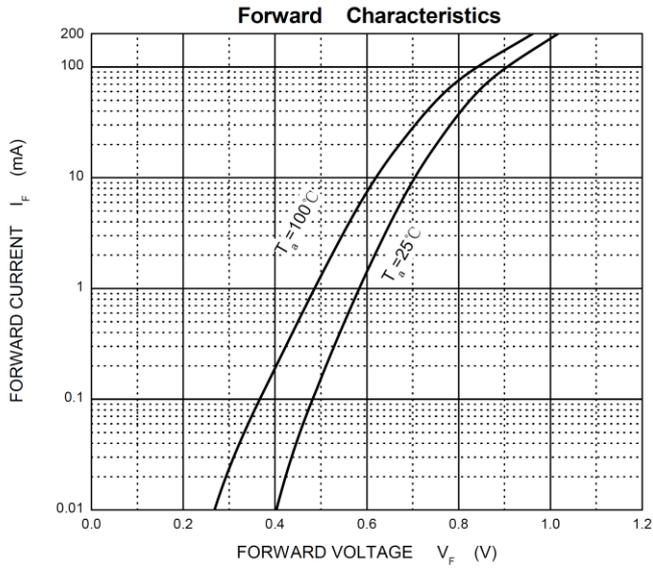
ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Average rectified output current	I_o	0.15	A
Forward continuous current	I_{FM}	0.30	A
Non-repetitive Peak Forward Surge Current @ $t=8.3$ ms	I_{FSM}	2	A
Power Dissipation	P_D	0.15	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150	$^\circ\text{C}$

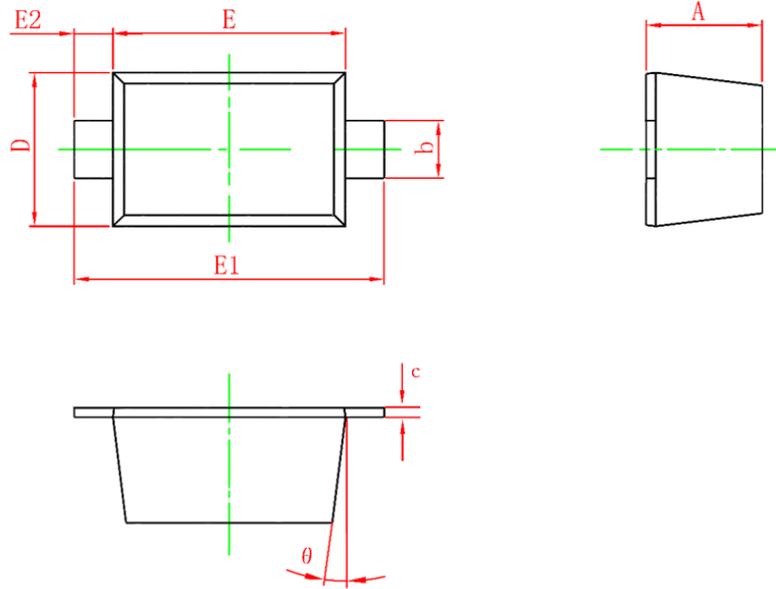
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Forward voltage	V_F	$I_F = 1\text{mA}$		0.715	V
		$I_F = 10\text{mA}$		0.855	V
		$I_F = 50\text{mA}$		1.0	V
		$I_F = 150\text{mA}$		1.25	V
Reverse current	I_R	$V_R = 20\text{V}$		25	nA
		$V_R = 75\text{V}$		1	μA
Diode capacitance	C_D	$V_R = 0\text{V}$, $f = 1\text{MHz}$		2	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}$, $I_{rr} = 0.1 \cdot I_R$, $R_L = 100\Omega$		4	ns

Typical Electrical and Thermal Characteristics



SOD-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.470	0.770	0.018	0.030
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200REF		0.008REF	
θ	7°REF		7°REF	