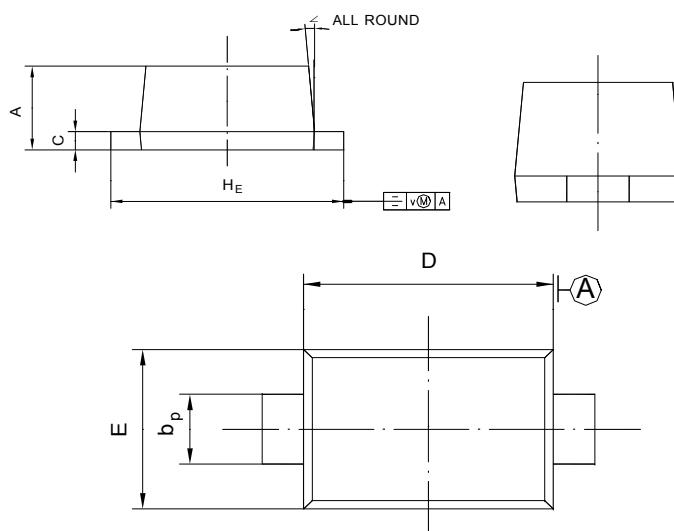
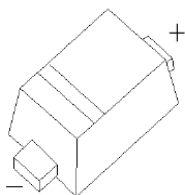


Features

- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications
- High conductance

FAST SWITCHING DIODE

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.50	0.40 0.20	0.14 0.05	1.30 1.10	0.90 0.75	1.70 1.50	0.1	5°

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
Average Rectified Forward Current	I _{F(AV)}	125	mA
Forward Continuous Current	I _{FM}	250	mA
Non-repetitive Peak Forward Surge Current	I _{FSM}	2 1	A
		at t = 1 μs at t = 100 ms	
Power Dissipation	P _{tot}	150	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	833	°C/W
Operating Temperature Range	T _j	- 65 to + 150	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1\text{ }\mu\text{A}$	$V_{(BR)R}$	75	-	V
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	- - - -	0.715 0.855 1 1.25	V
Peak Reverse Current at $V_R = 75\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$, $T_J = 150\text{ }^{\circ}\text{C}$ at $V_R = 25\text{ V}$, $T_J = 150\text{ }^{\circ}\text{C}$	I_R	- - - -	1 25 50 30	μA nA μA μA
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	2	pF
Reverse Recovery Time at $I_{rr} = 0.1 \times I_R$, $I_F = I_R = 10\text{ mA}$, $R_L = 100\text{ }\Omega$	t_{rr}	-	4	ns

RATING AND CHARACTERISTIC CURVES (1N4148WT)

