Silicon Epitaxial Planar Switching Diode

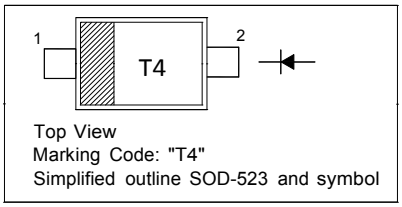
for high speed switching application

Features

- Extremely small surface mounting type
- High reliability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "T4"
Simplified outline SOD-523 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	90	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Current	I_{FM}	225	mA
Non-repetitive Peak Forward Surge Current (at t = 1 s)	I_{FSM}	500	mA
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Max.	Unit
Forward Voltage at I_F = 100 mA	V_F	1.2	V
Reverse Current at V_R = 80 V	I_R	0.1	µA
Capacitance Between Terminals at V_R = 0.5 V, f = 1 MHz	C_T	3	pF
Reverse Recovery Time at V_R = 6 V, I_F = 10 mA, R_L = 100 Ω	t_{rr}	4	ns

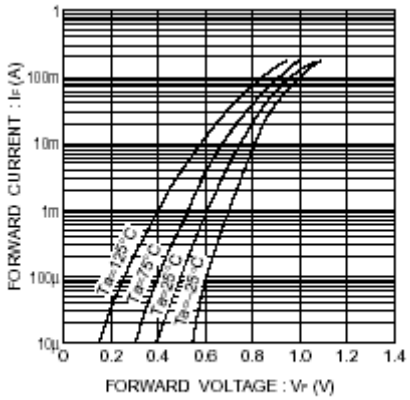


Fig.1 Forward characteristics

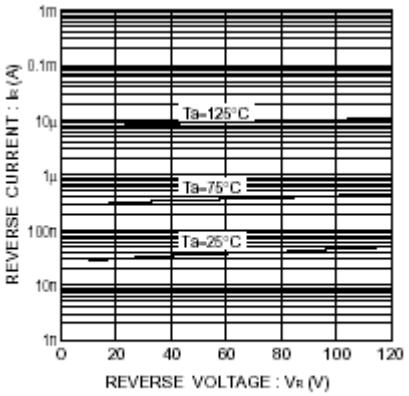


Fig.2 Reverse characteristics

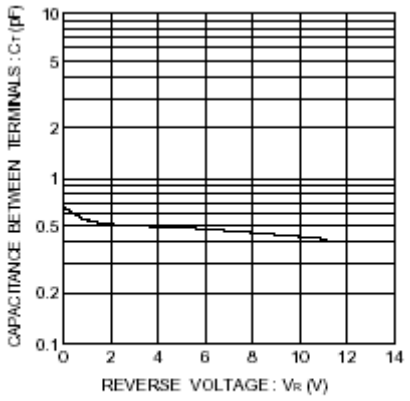


Fig.3 Capacitance between terminals

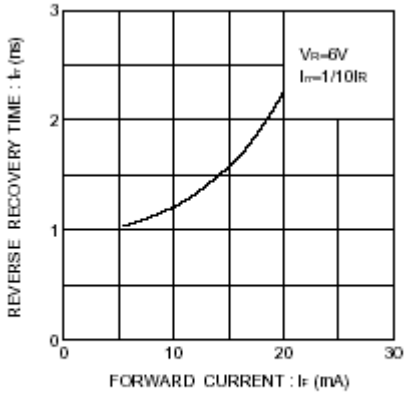


Fig.4 Reverse recovery time characteristics

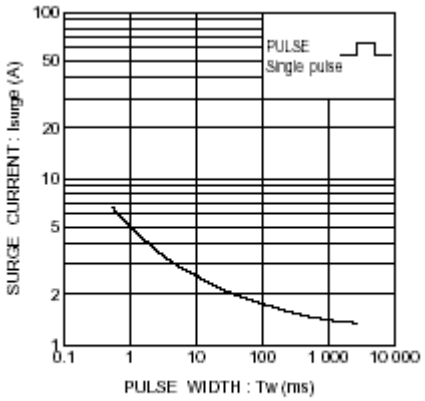


Fig.5 Surge current characteristics

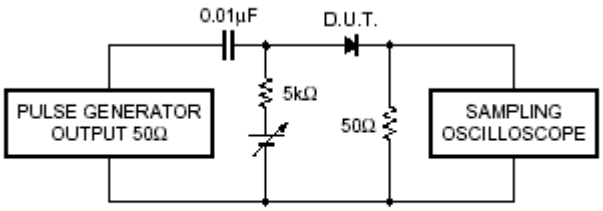
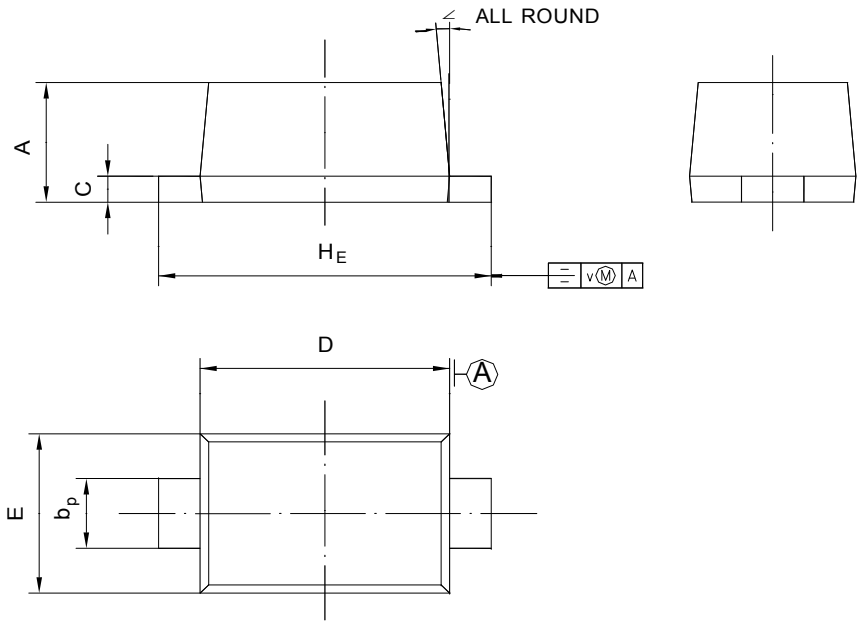


Fig.6 Reverse recovery time (t_{rr}) measurement circuit

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-523**



UNIT	A	b_p	C	D	E	H_E	V	∠
mm	0.70 0.55	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°