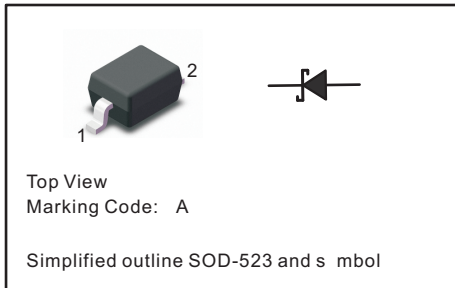


Silicon Epitaxial Planar Switching Diode
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode


FEATURES

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

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 at t = 1 μs at t = 100 ms	I _{FSM}	2 1	A
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 °C

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I _F = 1 mA at I _F = 10 mA at I _F = 50 mA at I _F = 150 mA	V _F	- - - -	0.715 0.855 1 1.25	V
Peak Reverse Current at V _R = 75 V at V _R = 20 V at V _R = 75 V, T _J = 150 °C at V _R = 25 V, T _J = 150 °C	I _R	- - - -	1 25 50 30	μA nA μA μA
Total Capacitance at V _R = 0 V, f = 1 MHz	C _T	-	2	pF
Reverse Recovery Time at I _{rr} = 0.1 X I _R , I _F = I _R = 10 mA, R _L = 100 Ω	t _{rr}	-	4	ns

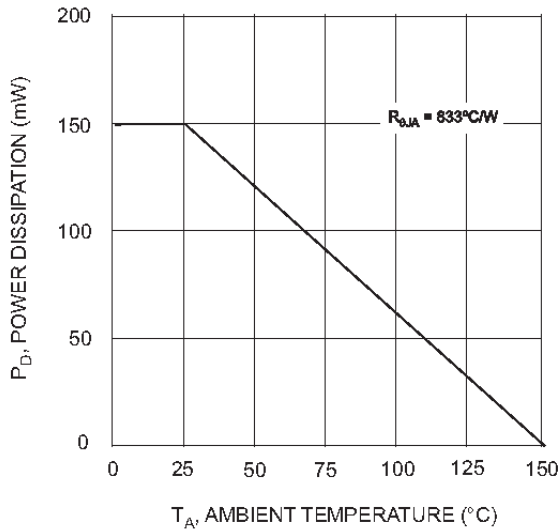


Fig. 1 Derating Curve

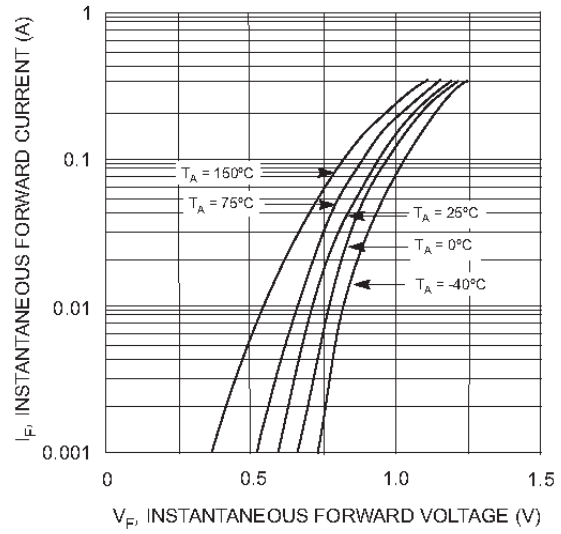


Fig. 2 Forward Characteristics

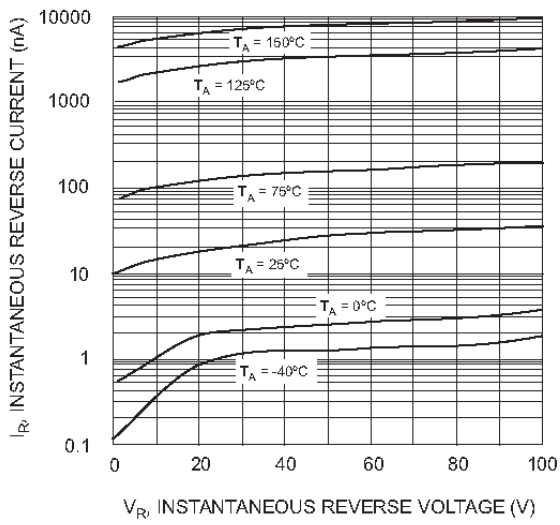


Fig. 3 Typical Reverse Characteristics

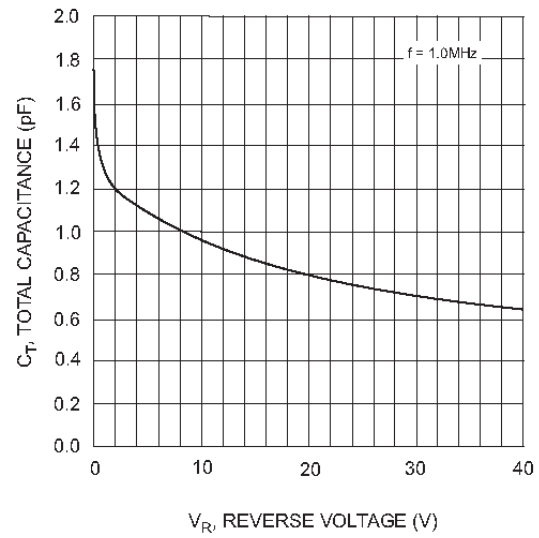
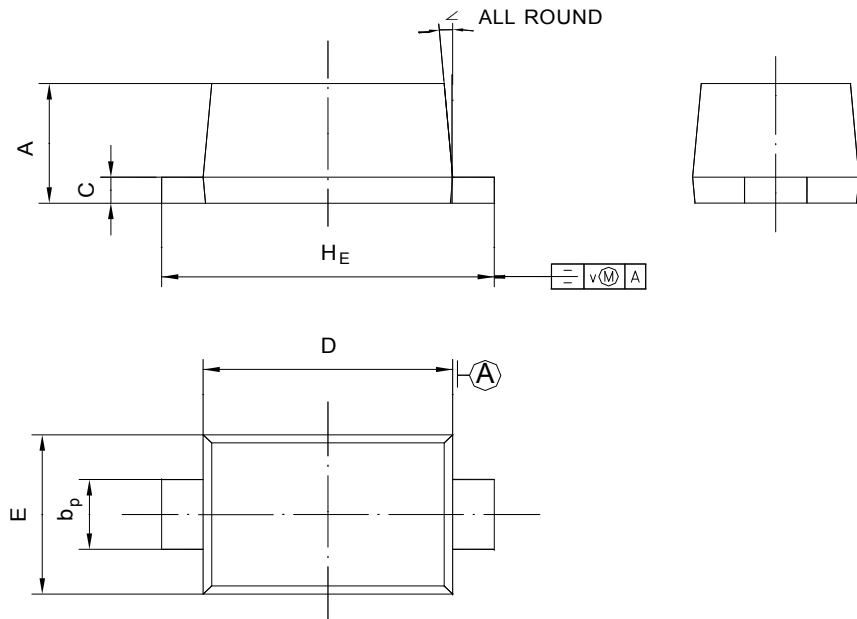


Fig. 4 Typical Capacitance vs. Reverse Voltage

PACKAGE OUTLINE

SOD-523

Plastic surface mounted package; 2 leads



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70	0.4	0.135	1.25	0.85	1.7	0.1	5°
	0.60	0.3	0.100	1.15	0.75	1.5		