1SS368

SILICON EPITAXIAL PLANAR DIODE

Features

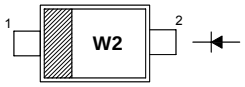
- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

Applications

- Ultra high speed switching

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**W2**"
Simplified outline SOD-323 and symbol

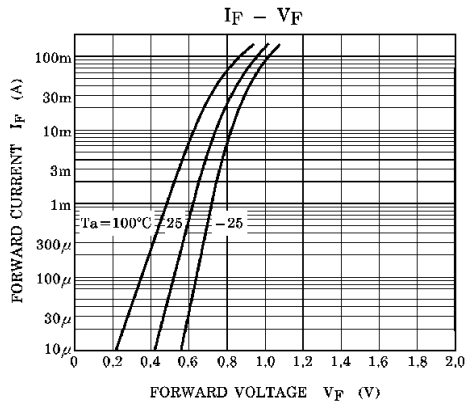
Absolute Maximum Ratings (T_a = 25 °C)

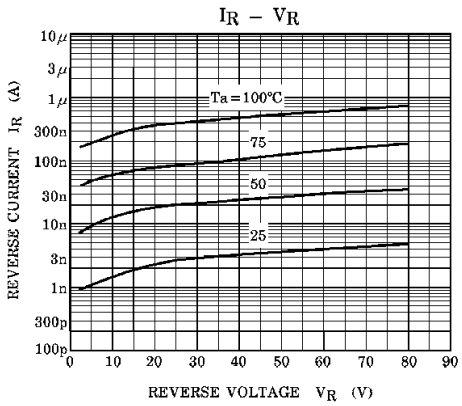
Parameter	Symbol	Value	Unit
Maximum (Peak) Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Average Forward Current	I_O	100	mA
Maximum (Peak) Forward Current	I_{FM}	200	mA
Surge Current (10 ms)	I_{FSM}	1	A
Power Dissipation	P_{tot}	150 [1)]	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	- 55 to + 125	°C

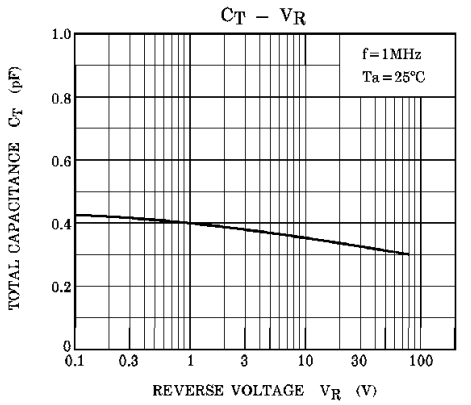
[1)] Mounted on a glass epoxy circuit board of 20 X 20 mm, pad dimension of 4 X 4 mm

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 = 30 V at V_R = 80 V	I_R	0.1 0.5	µA
Total Capacitance at f = 1 MHz	C_T	3	pF
Reverse Recovery Time at $I_F = I_R$ = 10 mA, I_{rr} = 0.1 X I_R , R_L = 100 Ω	t_{rr}	4	ns

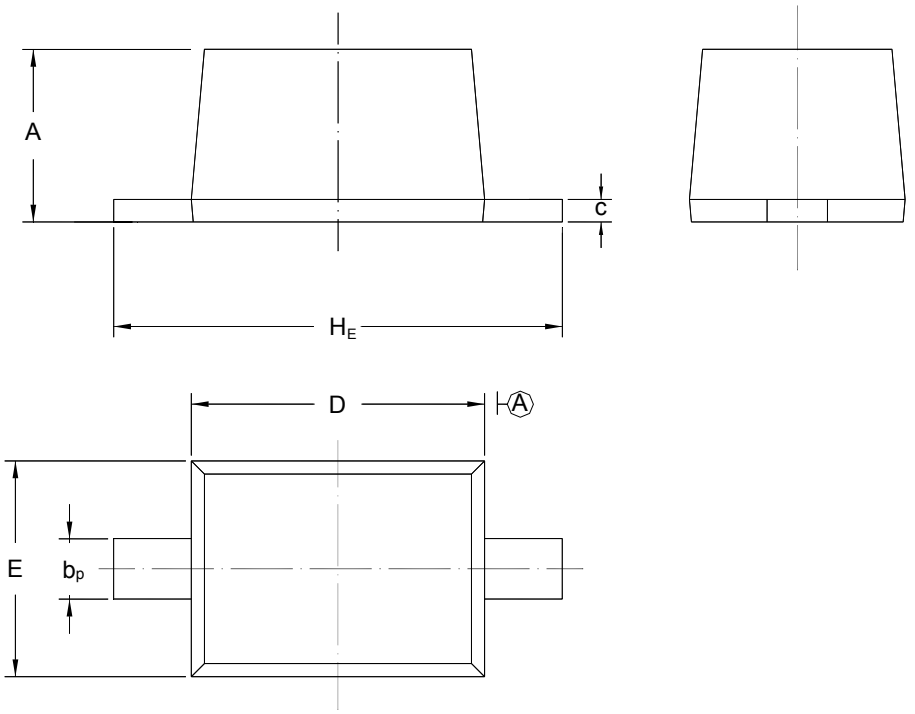

$I_F - V_F$
FORWARD CURRENT I_F (A)
100m
30m
10m
3m
1m
300μ
100μ
30μ
10μ
Ta=100°C
25
−25
0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
FORWARD VOLTAGE V_F (V)


$I_R - V_R$
REVERSE CURRENT I_R (A)
10μ
3μ
1μ
300n
100n
30n
10n
3n
1n
300p
100p
Ta=100°C
75
50
25
0
10
20
30
40
50
60
70
80
90
REVERSE VOLTAGE V_R (V)


$C_T - V_R$
TOTAL CAPACITANCE C_T (pF)
1.0
0.8
0.6
0.4
0.2
0
f=1MHz
Ta=25°C
0.1
0.3
1
3
10
30
100
REVERSE VOLTAGE V_R (V)

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-323**



UNIT	A	b_p	C	D	E	H_E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30