

1SS400BP

Silicon Epitaxial Planar Switching Diode

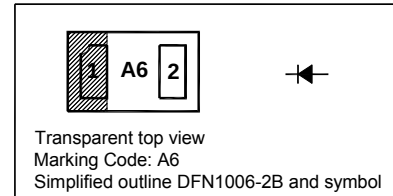
for high speed switching application

Features

- Ultra small surface mounting type
- High reliability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

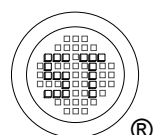


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

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, $R_L = 100 \Omega$	t_{rr}	4	ns



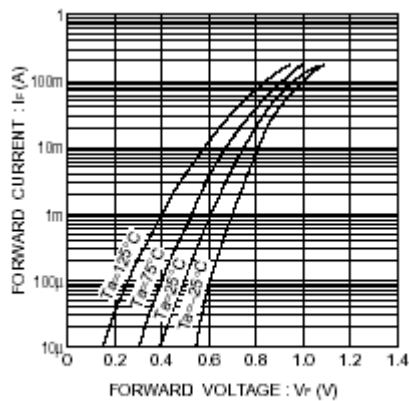


Fig.1 Forward characteristics

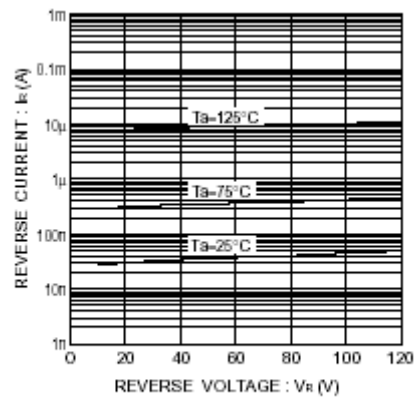


Fig.2 Reverse characteristics

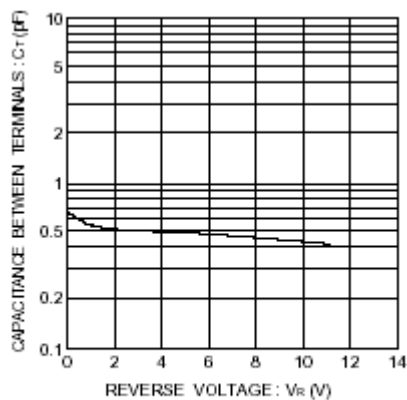


Fig.3 Capacitance between terminals

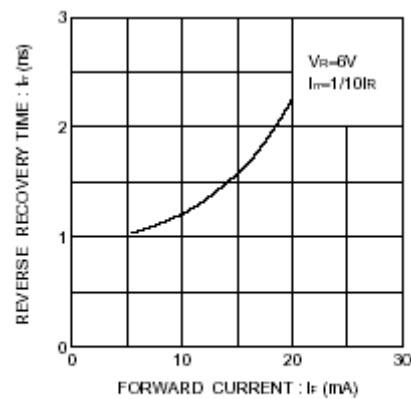


Fig.4 Reverse recovery time characteristics

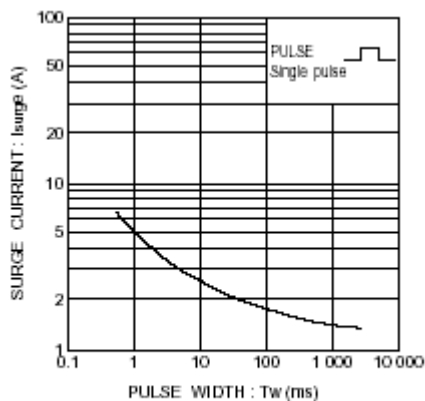


Fig.5 Surge current characteristics

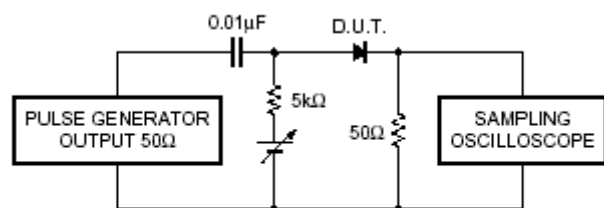
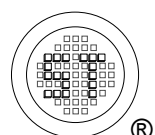


Fig.6 Reverse recovery time (t_r) measurement circuit

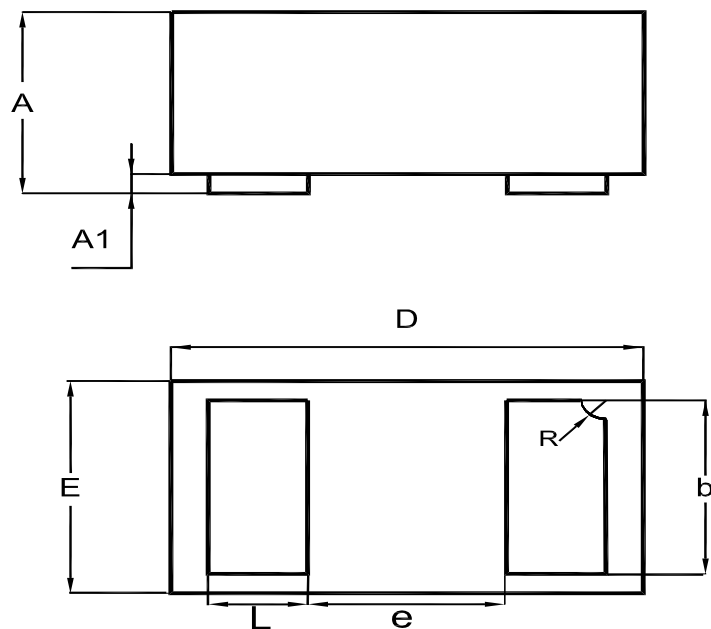


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PACKAGE OUTLINE

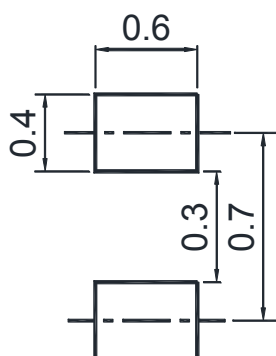
Plastic surface mounted package

DFN1006-2B



UNIT	A	A1	b	D	E	e	L	R
mm	0.40 0.36	0.05 0	0.55 0.45	1.05 0.95	0.65 0.55	0.4	0.3 0.2	0.15 0.05

Recommended Soldering Footprint



Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN1006-2B	8	4 ± 0.1	0.157 ± 0.004	178	7	5,000

