



DATA SHEET

SEMICONDUCTOR

1SS400G

Switching diode



• Applications

High speed switching

• Features

- 1) Extremely small surface mounting type.
- 2) High Speed.
- 3) High reliability.

• Construction

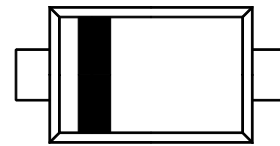
Silicon epitaxial planar

• Device Marking

1SS400G=7

• Pb-Free package is available

SOD - 723



ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	90	V
DC reverse voltage	V_R	80	V
Peak forward current	I_{FM}	225	mA
Mean rectifying current	I_O	100	mA
Surge current (1s)	I_{surge}	500	mA
Junction temperature	T_J	125	°C
Storage temperature	T_{sg}	- 55 ~ +125	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	1.2	V	$I_F=100mA$
Reverse current	I_R	-	-	0.1	μA	$V_R=80V$
Capacitance between terminals	C_T	-	0.72	3.0	pF	$V_R=0.5V, f=1MHz$
Reverse recovery time	t_{rr}	-	-	4	n	$s_R=6V, I_F=10mA, R_L=100$

ORDRING INFORMATION

Device	Marking	Shipping
1SS400G	7	3000/Tape&Reel

DEVICE CHARACTERISTICS

1SS400G

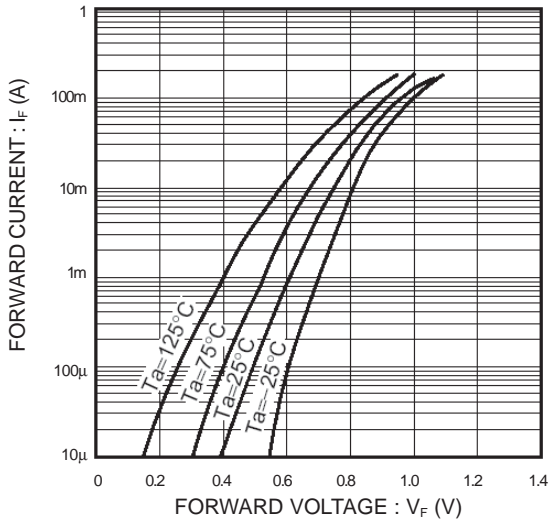


Fig.1 Forward characteristics

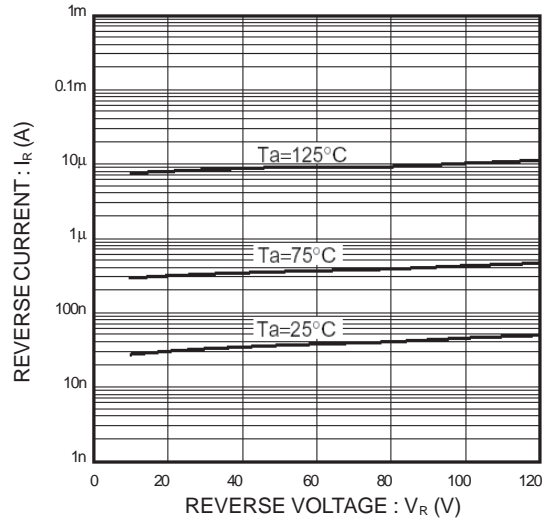


Fig.2 Reverse characteristics

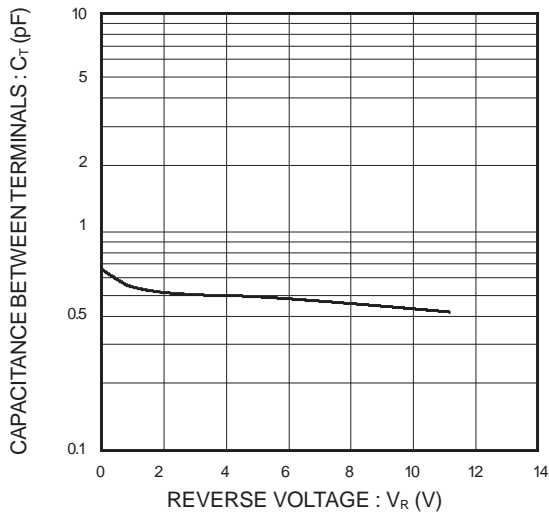


Fig.3 Capacitance between terminals

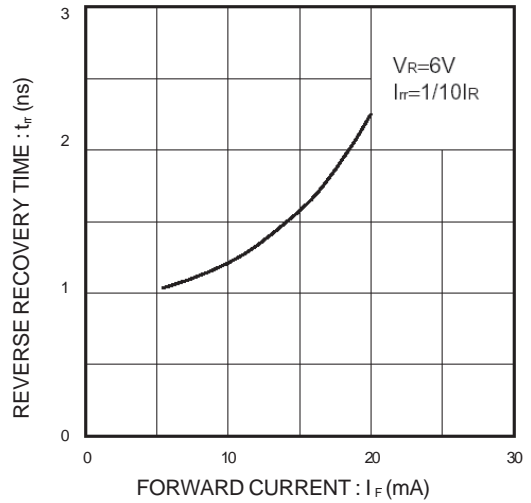


Fig.4 Reverse recovery time characteristics

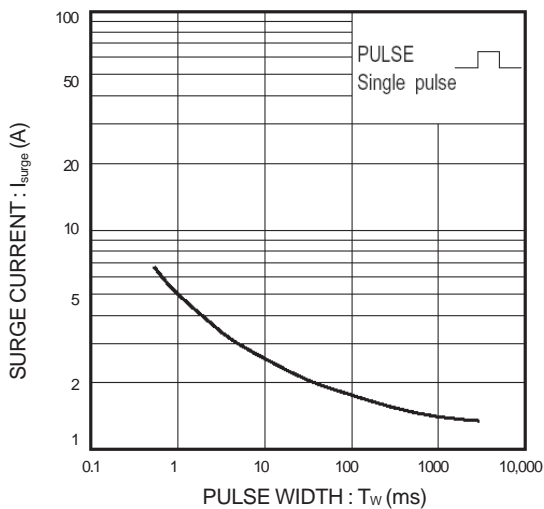


Fig.5 Surge current characteristics

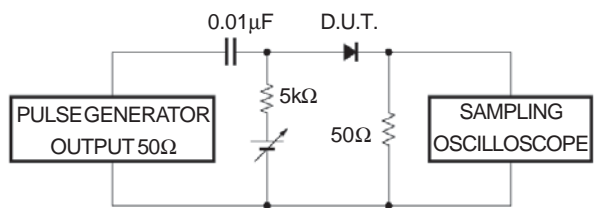
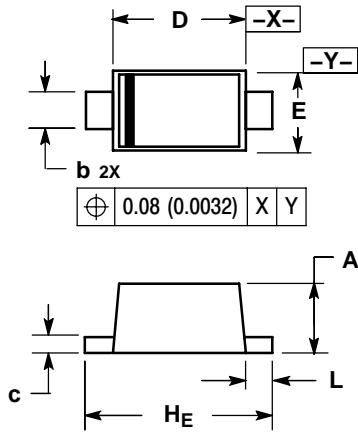


Fig.6 Reverse recovery time (t_{rr}) measurement circuit

PACKAGE OUTLINE & DIMENSIONS

1SS400G

SOD-723



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETER.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.49	0.52	0.55	0.019	0.020	0.022
b	0.25	0.28	0.32	0.0098	0.011	0.013
c	0.08	0.12	0.15	0.0032	0.0047	0.0059
D	0.95	1.00	1.05	0.037	0.039	0.041
E	0.55	0.60	0.65	0.022	0.024	0.026
HE	1.35	1.40	1.45	0.053	0.055	0.057
L	0.15	0.20	0.25	0.006	0.0079	0.010

SOLDERING FOOTPRINT*

