



Micro Commercial Components



Micro Commercial Components  
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# 1SS400G

## Features

- High speed switching diode
- Small Surface Mount Type
- High Reliability with High Surge Current Handling Capability
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

## Maximum Ratings

- Case: SOD-723, Molded Plastic
- Marking: 7
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings @ 25°C Unless Otherwise Specified

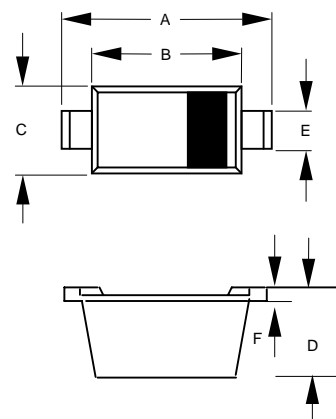
Maximum RMS Voltage	$V_R$	80	V
Peak Reverse Voltage	$V_{RM}$	90	V
Average Forward Rectified Current	$I_O$	100	mA
Peak Forward Current	$I_{FM}$	225	mA
Surge Current(1S)	$I_{surge}$	500	mA
Total Power Dissipation	$P_{TOT}$	100	mW
Thermal Resistance,Junction to Ambient	$R_{thJA}$	625	°C/W
Storage Temperature Range	$T_{STG}$	-55 to +125	°C
Junction Temperature	$T_j$	125	°C

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Instantaneous Forward Voltage	$V_F$	1.20V	$I_{FM} = 100mA$ ; $T_J = 25^\circ C$
Maximum Average Reverse Current	$I_R$	0.1uA	$V_R=80Volts$ $T_J = 25^\circ C$
Capacitance between Terminals	$C_T$	3.0pF	Measured at 1.0MHz, $V_R=0.5V$
Reverse Recovery Time	$T_{rr}$	4nS	$I_F=10mA$ $V_R = 6V, R_L=100 \Omega$

## 90Volts High Speed Switching Diodes

## SOD-723



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.051	.059	1.30	1.50	
B	.035	.043	0.90	1.10	
C	.022	.026	0.55	0.65	
D	.021	.026	0.525	0.65	
E	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	

## Typical Characteristics

### ●Electrical characteristic curves ( $T_a = 25^\circ\text{C}$ )

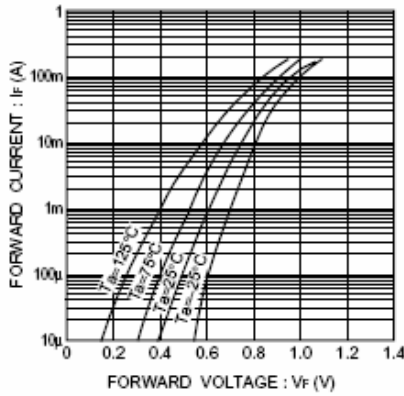


Fig.1 Forward characteristics

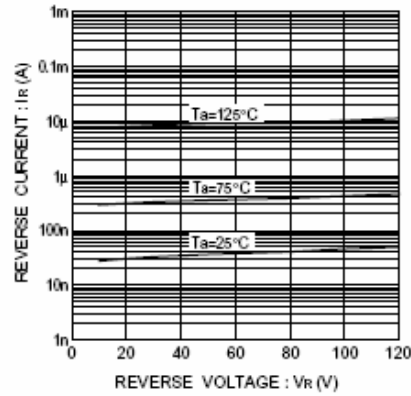


Fig.2 Reverse characteristics

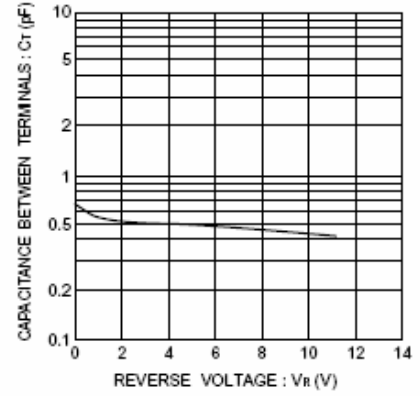


Fig.3 Capacitance between terminals

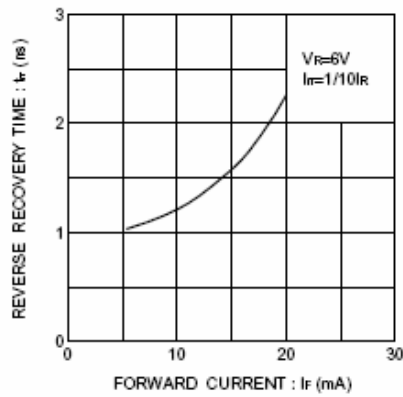


Fig.4 Reverse recovery time characteristics

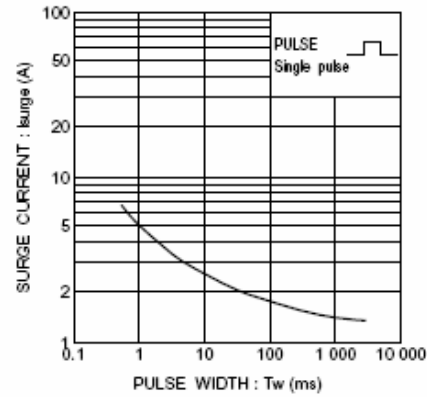


Fig.5 Surge current characteristics

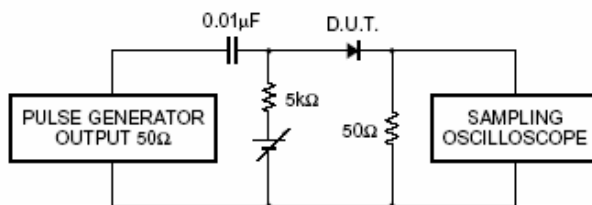


Fig.6 Reverse recovery time ( $t_r$ ) measurement circuit

## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;8Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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