

Features

- Fast switching speed
- Low reverse leakage current

Mechanical Data

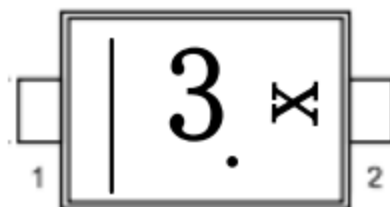
- Case: SOD-723 Plastic
- Case material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture sensitivity: Level 1 per J-STD-020D
- Lead free in RoHS 2002/95/EC compliant



Circuit Diagram



Marking:



"3" is Part Number, Fixed
"x" is internal Code

Maximum Ratings & Thermal Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	1SS400G	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	90	V
DC Blocking Voltage	V_R	80	V
Forward Continuous Current	I_{FM}	225	mA
Average Rectified Output Current	I_O	100	mA
Peak Forward Surge Current @t=1s	I_{FSM}	0.5	A
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55~+125	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Test Condition	Symbol	1SS400G	Unit
Maximum Forward Voltage	$I_F = 100\text{mA}$	V_F	1.2	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$V_R = 80\text{V}$	I_R	0.1	μA
Typical Diode Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$	C_D	3	pF
Reverse Recovery time	$V_R = 6\text{V}, I_R = I_F = 10\text{mA}, R_L = 100\Omega$	trr	4	ns

Typical Electrical Characteristic Curves

Fig.1 Typical Forward Characteristics

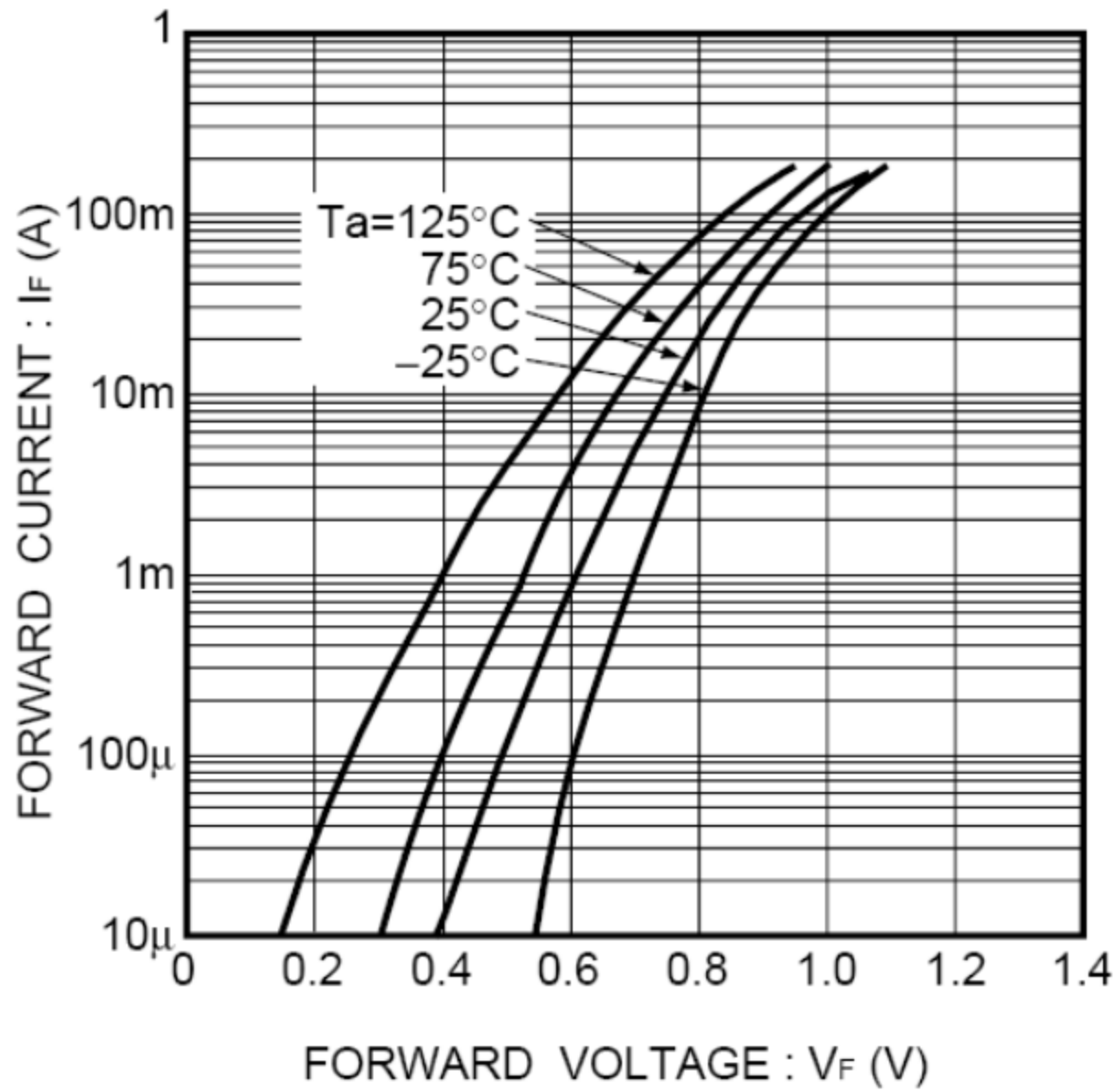


Fig.2 Typical Reverse Characteristics

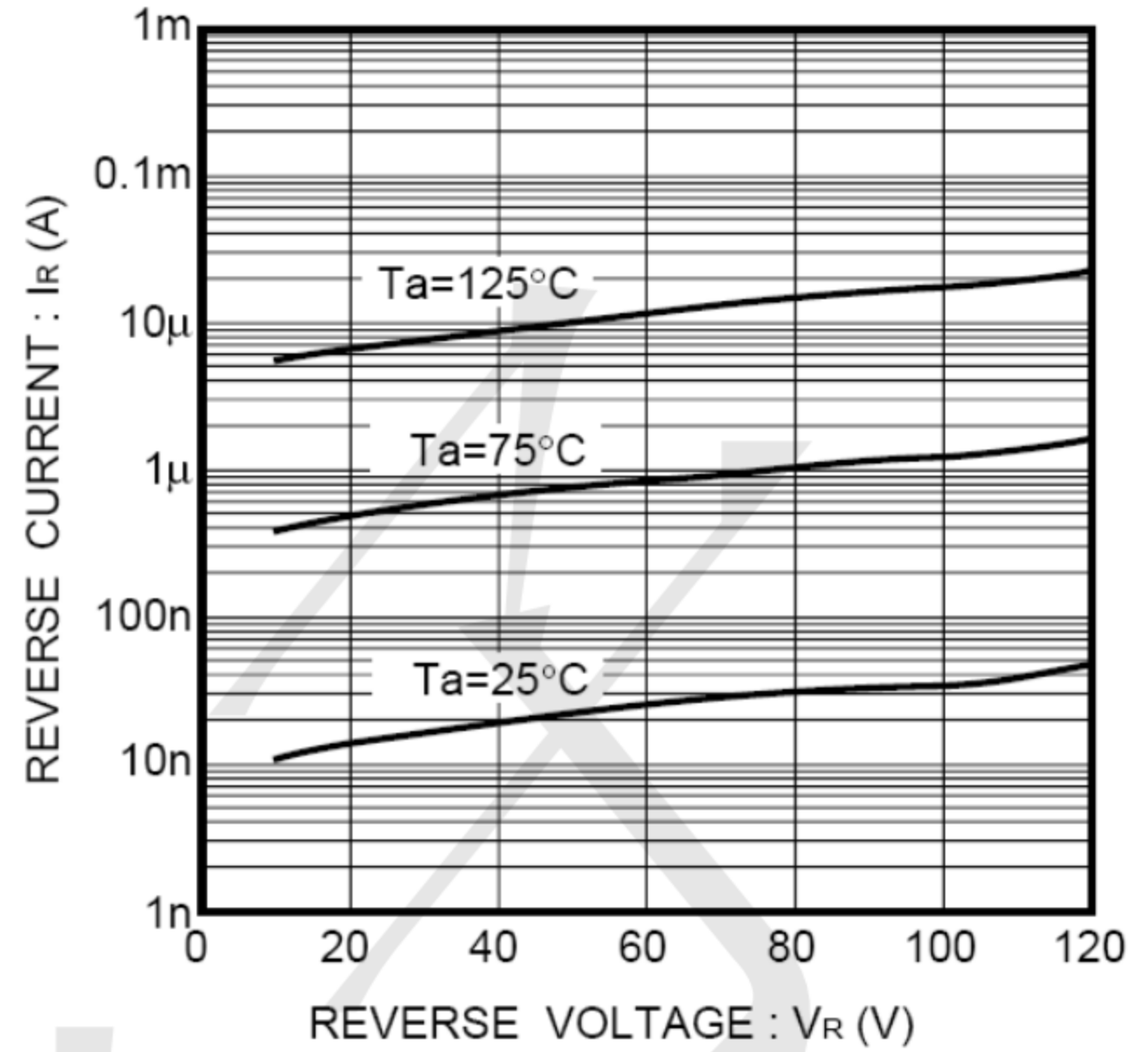


Fig.3 Total Capacitance vs. Reverse Voltage

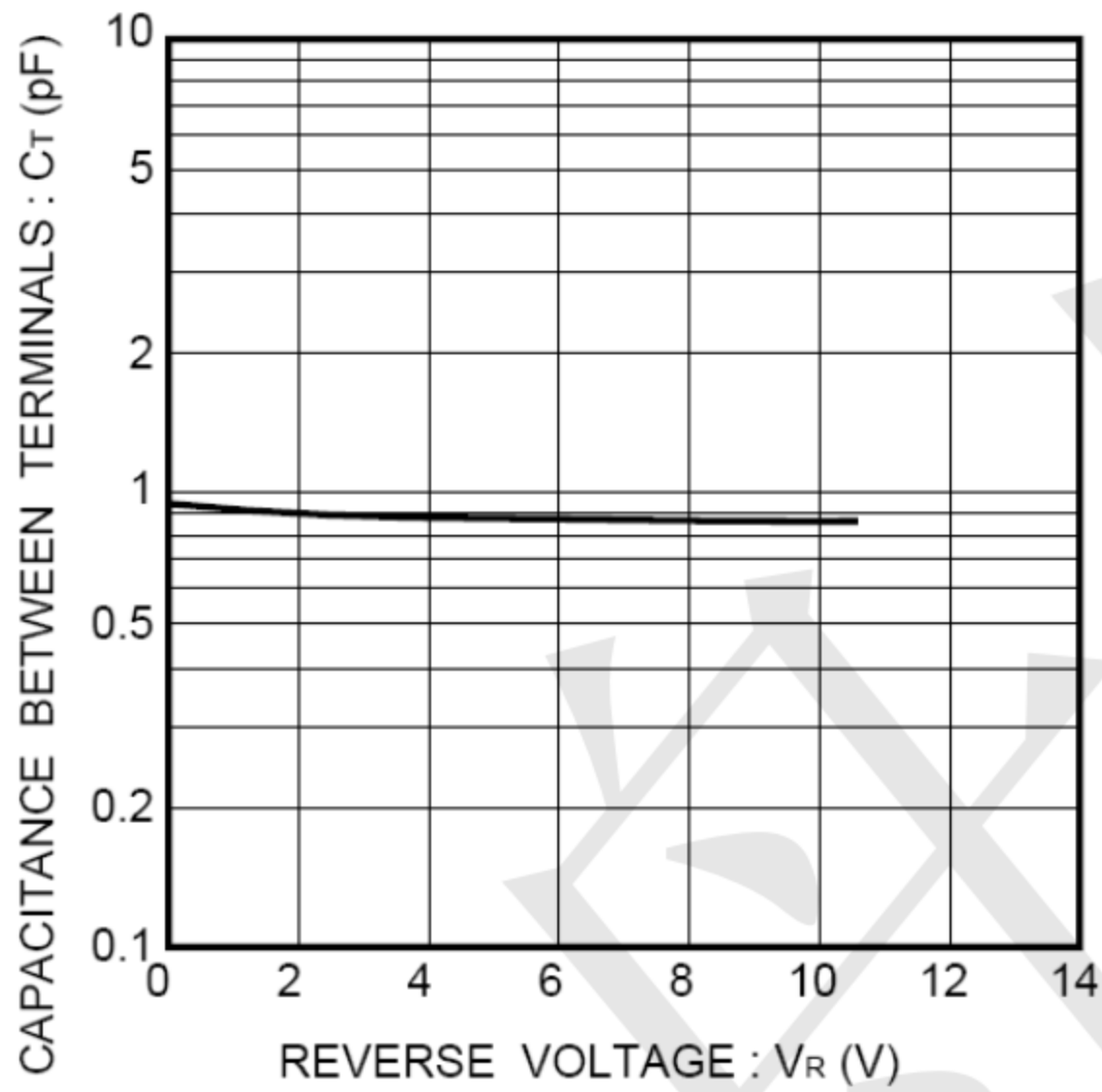


Fig.4 Reverse Recovery Time vs. Forward Current

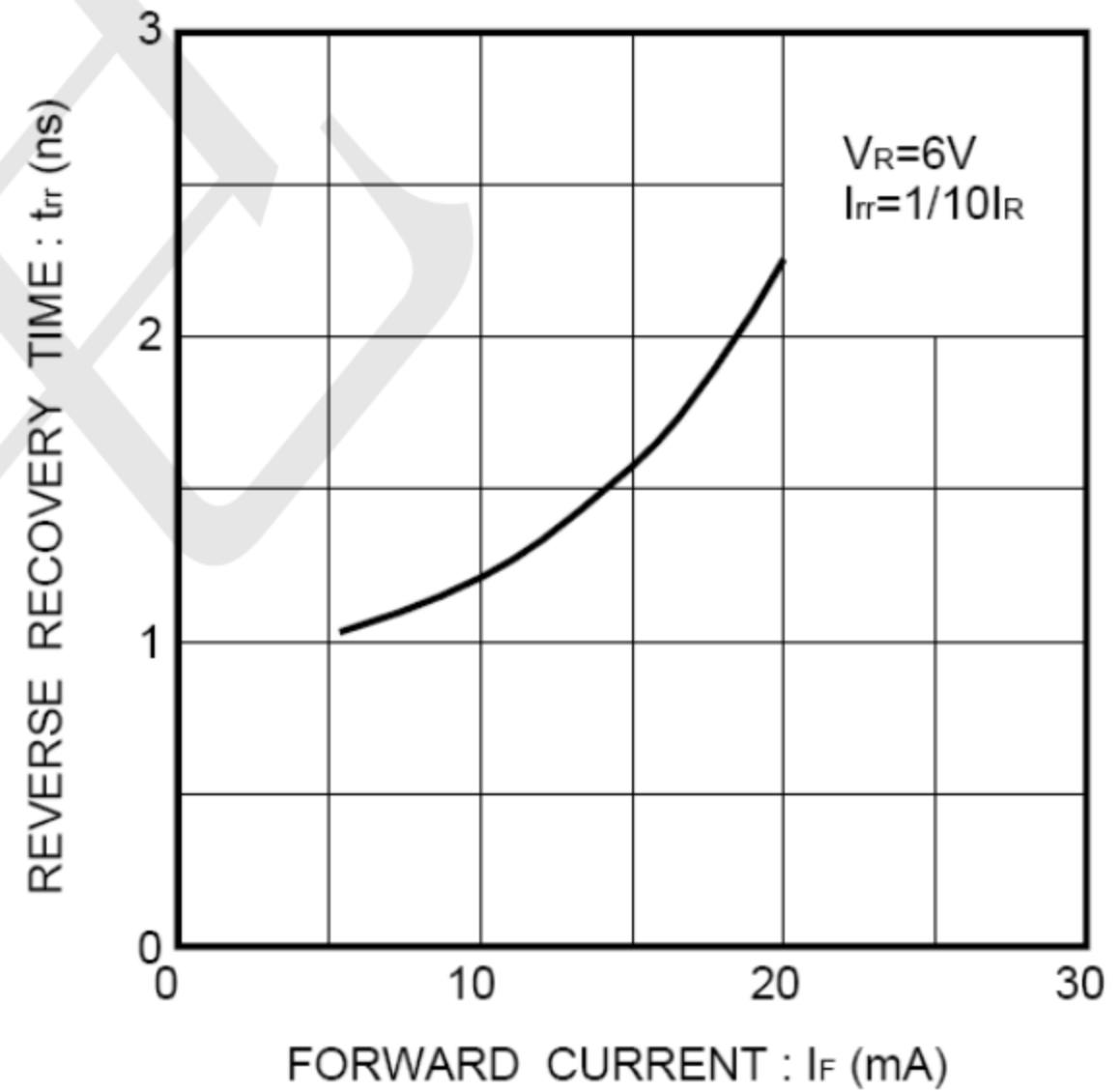


Fig.5 Surge Current Characteristics

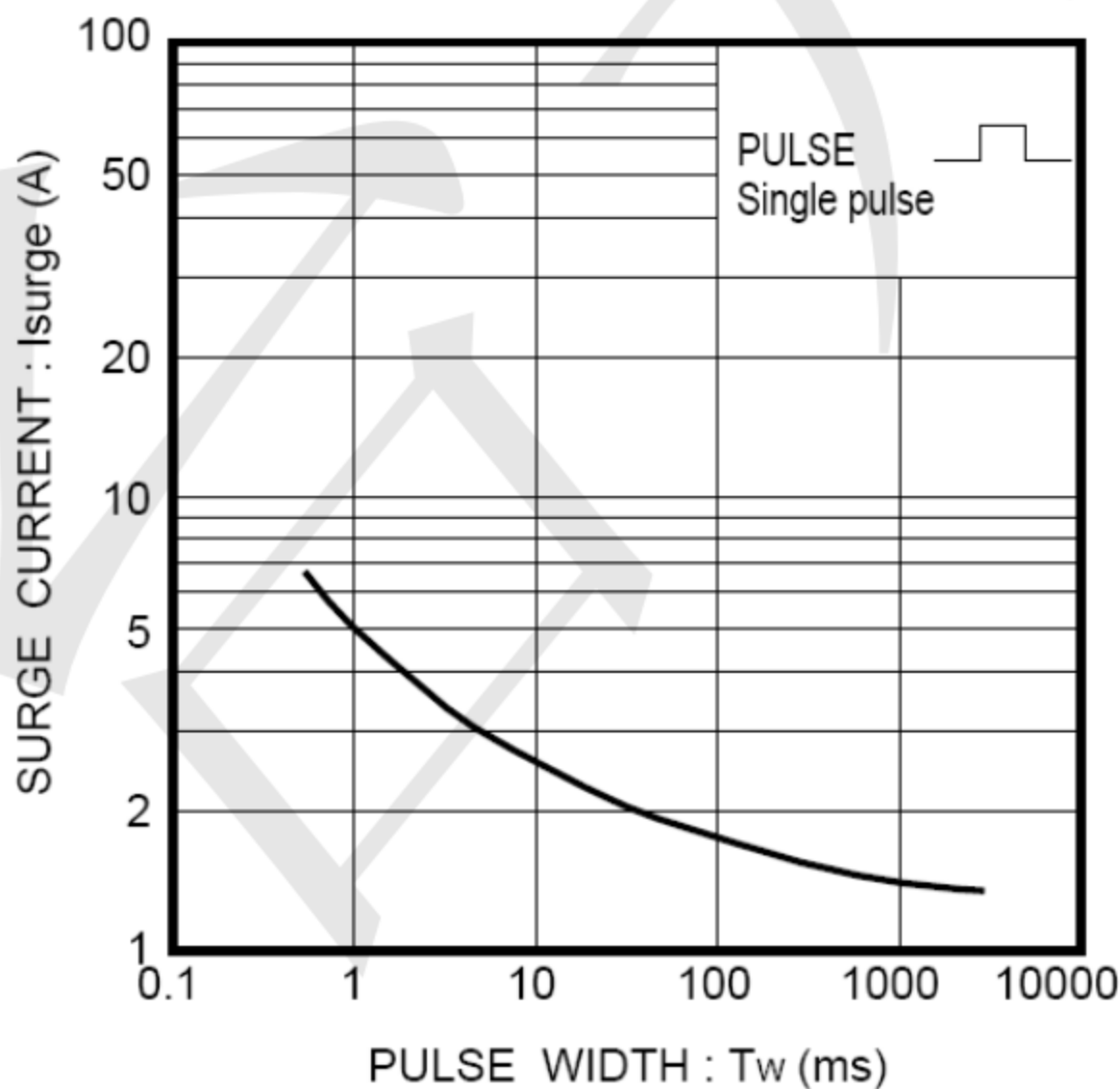
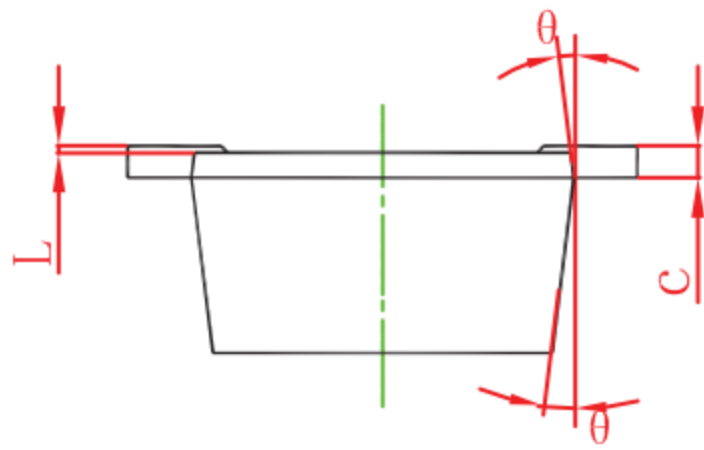
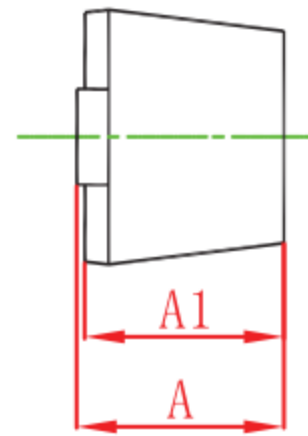
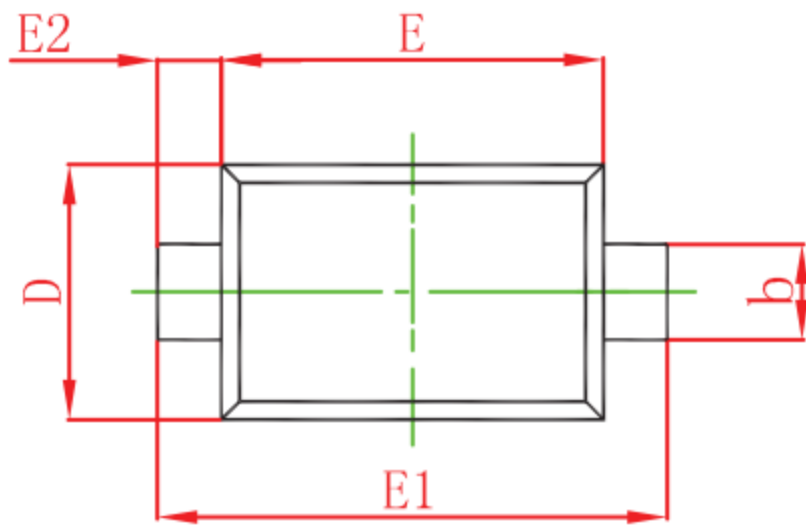


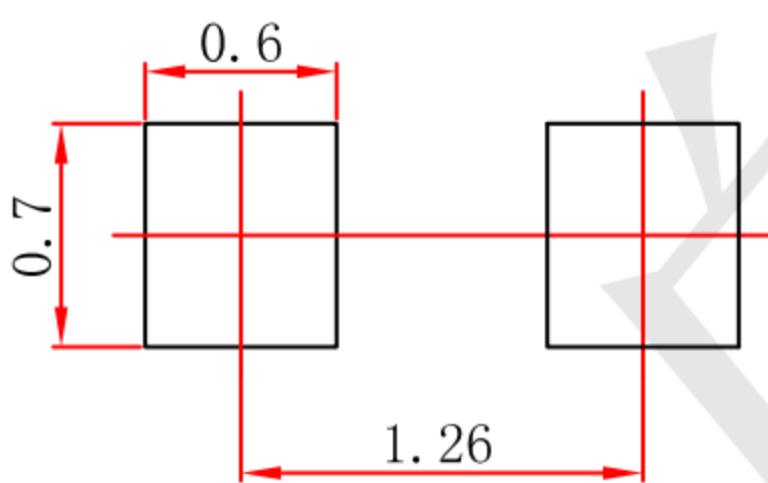
Fig.6 Reverse recovery time (t_{rr}) measurement circuit

Outline Drawing - SOD-723 (unit: mm)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.525	0.650	0.021	0.026
A1	0.515	0.580	0.020	0.023
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.550	0.650	0.022	0.026
E	0.900	1.100	0.035	0.043
E1	1.300	1.500	0.051	0.059
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

Mounting Pad Layout-SOD723 (unit: mm)



- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.