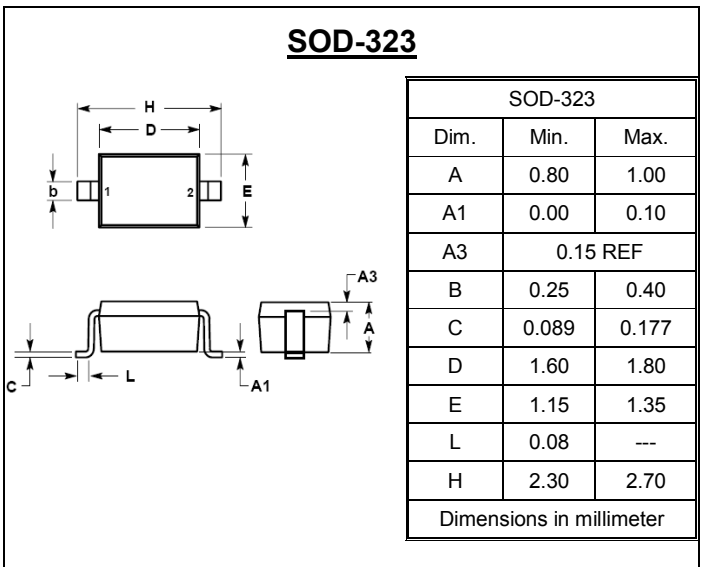


**SURFACE MOUNT  
FAST SWITCHING DIODE**

**REVERSE VOLTAGE – 80 Volts  
FORWARD CURRENT – 0.1 Ampere**

- FEATURES**
- Fast switching speed
  - Low reverse leakage current
- MECHANICAL DATA**
- Case: SOD-323 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



**Maximum Ratings & Thermal Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified**

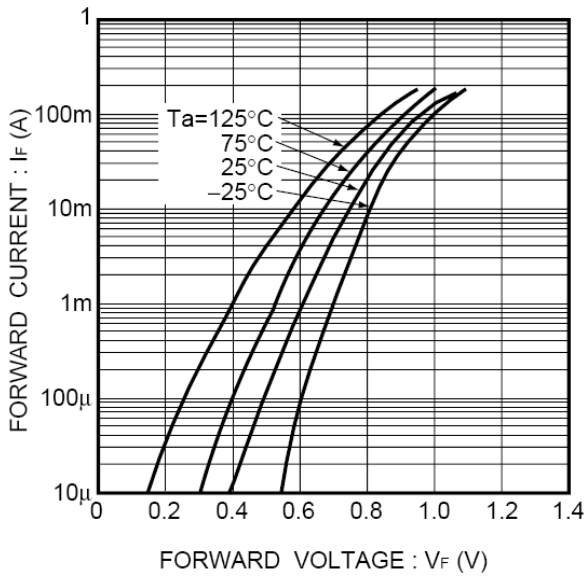
Characteristic	Symbol	1SS355	Units
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	90	V
DC Blocking Voltage	V <sub>R</sub>	80	V
Forward Continuous Current	I <sub>FM</sub>	225	mA
Average Rectified Output Current	I <sub>O</sub>	100	mA
Peak Forward Surge Current @t=1s	I <sub>FSM</sub>	0.5	A
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+150	°C

**Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified**

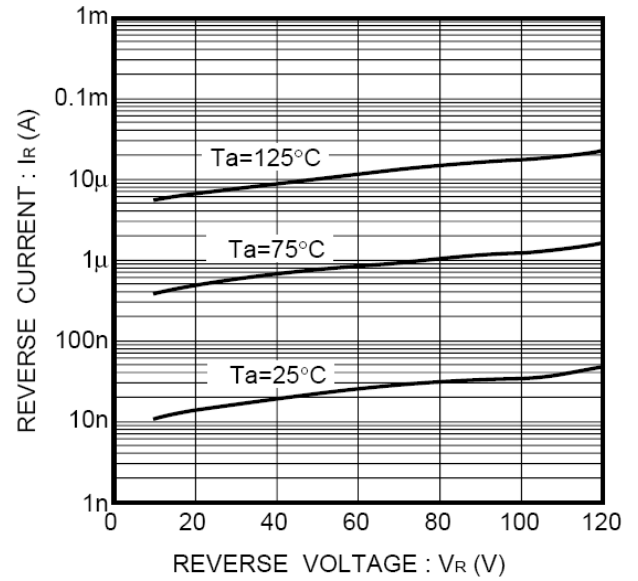
Characteristic	Test Condition	Symbol	1SS355	Unit
Maximum Forward Voltage	I <sub>F</sub> = 100mA	V <sub>F</sub>	1.2	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	V <sub>R</sub> = 80V	I <sub>R</sub>	0.1	uA
Typical Diode Capacitance	V <sub>R</sub> = 0V, f=1MHz	C <sub>D</sub>	3	pF
Reverse Recovery time	V <sub>R</sub> =6V, I <sub>R</sub> =I <sub>F</sub> =10mA R <sub>L</sub> =100Ω	trr	4	ns

REV. 3, Jul-2013, KSYR12

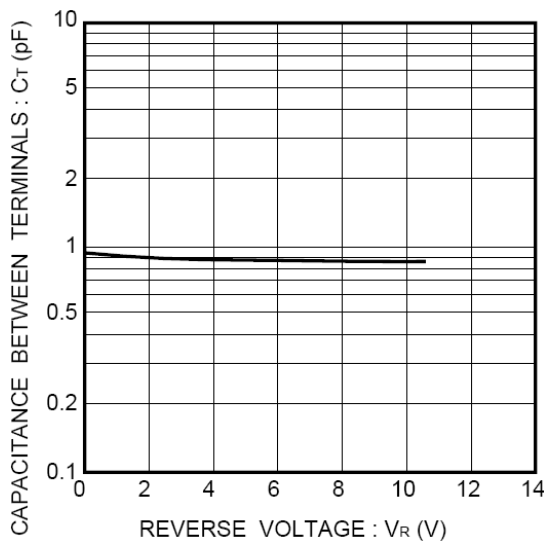
**Fig.1 Typical Forward Characteristics**



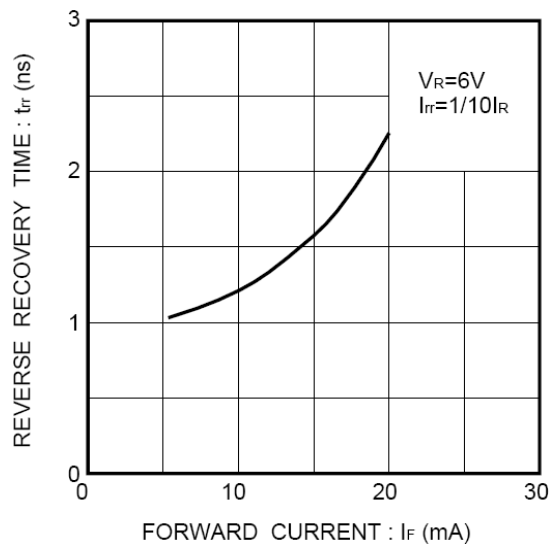
**Fig.2 Typical Reverse Characteristics**



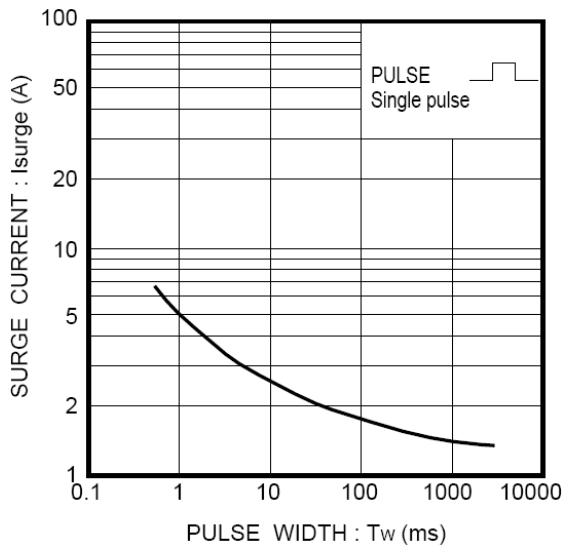
**Fig.3 Total Capacitance vs. Reverse Voltage**



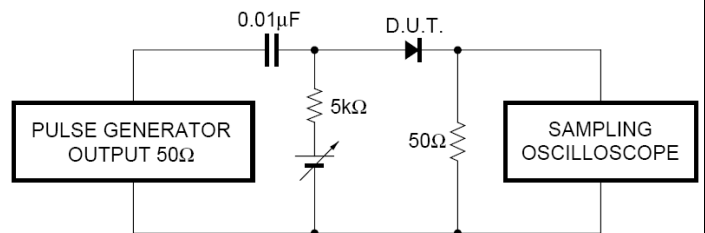
**Fig.4 Reverse Recovery Time vs. Forward Current**



**Fig.5 Surge Current Characteristics**




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



**Device Marking :**



Device P/N	Marking code	Equivalent Circuit Diagram
1SS355	5D	 The diagram shows a diode symbol with terminal 1 on the left and terminal 2 on the right. The arrow points from terminal 2 to terminal 1, indicating the direction of current flow.

## **Important Notice and Disclaimer**

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## New Marking Rule Notification

Range: In order to have well management in process control, the new marking rule is applied to small signal device including Switching Diode, Transistor and Schottky Diode.

Package: SOD-123 / SOD-323 / SOD-523

