

**SURFACE MOUNT
FAST SWITCHING DIODE**

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

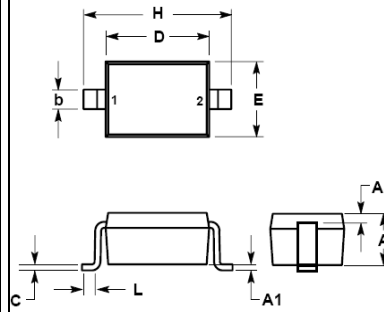
FEATURES

- Fast switching speed
- Low reverse leakage current
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. “Green” Device (Note 3)**

MECHANICAL DATA

- Package: SOD-323 Plastic
- Package material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture sensitivity: Level 1 per J-STD-020D

SOD-323



SOD-323		
Dim.	Min.	Max.
A	0.80	1.00
A1	0.00	0.10
A3	0.15 REF	
B	0.25	0.40
C	0.089	0.177
D	1.60	1.80
E	1.15	1.35
L	0.08	---
H	2.30	2.70
Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	1SS355	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	150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	1SS355	Units
Maximum Forward Voltage	I _F = 100mA	V _F	1.2	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	V _R = 80V	I _R	0.1	uA
Maximum Total Capacitance	V _R = 0V, f=1MHz	C _T	3	pF
Characteristic	Test Condition	Symbol	MAX	Units
Reverse Recovery time	V _R =6V, I _R =I _F =10mA R _L =100Ω	t _{rr}	4	ns

Notes:

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

RATING AND CHARACTERISTIC CURVES
1SS355

Fig.1 Typical Forward Characteristics

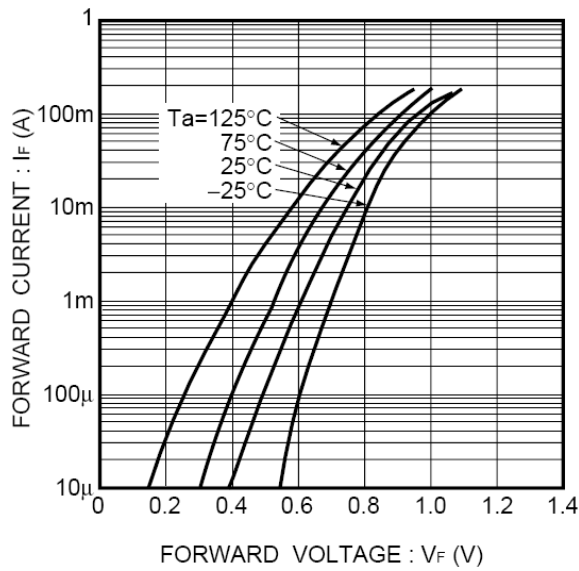


Fig.2 Typical Reverse Characteristics

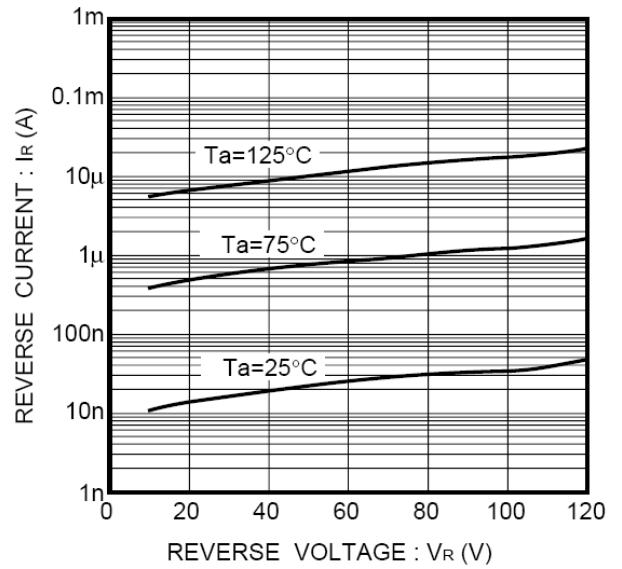


Fig.3 Total Capacitance vs. Reverse Voltage

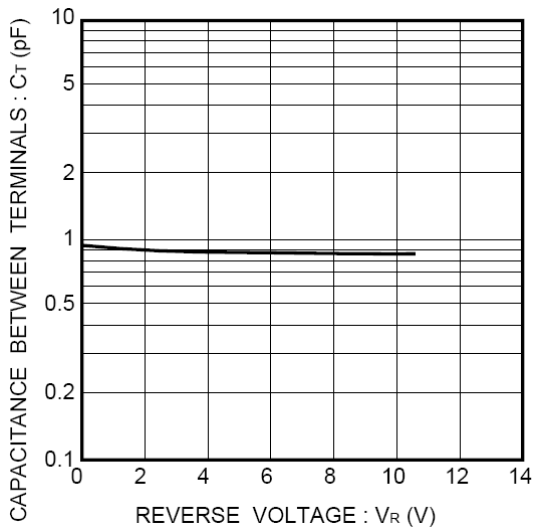


Fig.4 Reverse Recovery Time vs. Forward Current

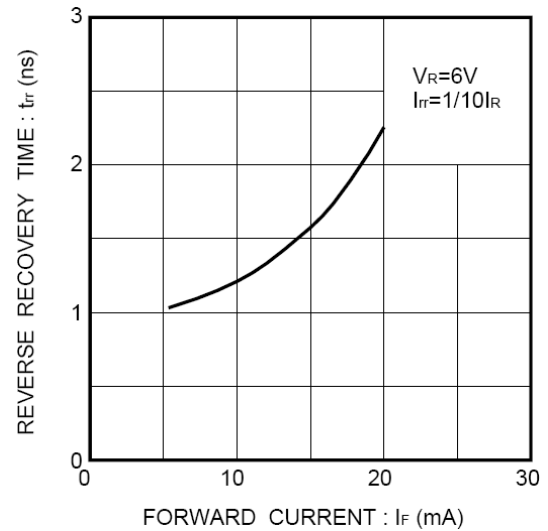


Fig.5 Surge Current Characteristics

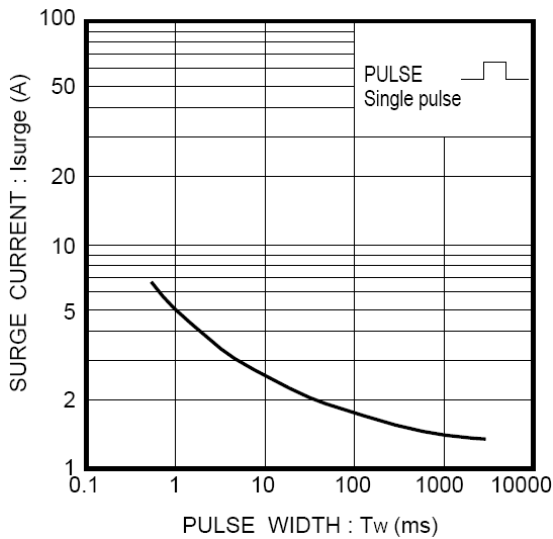
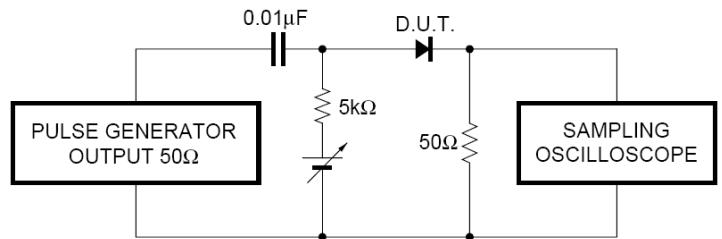


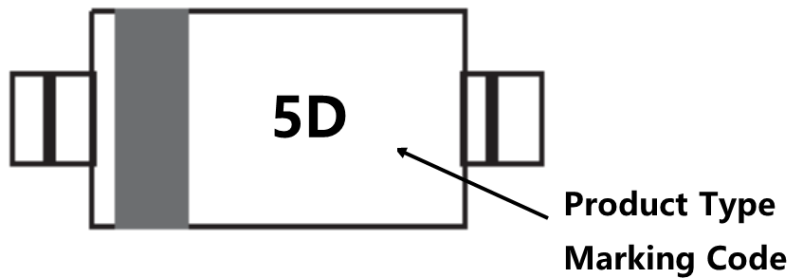
Fig.6 Reverse recovery time (t_{rr}) measurement circuit

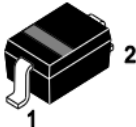



Ordering Information:

Part Number	Package	Packing	
		Qty.	Carrier
1SS355-7	SOD-323	3000pcs	Tape & Reel

Marking Information:



Device P/N	Marking Code	Pin Diagram	Equivalent Circuit Diagram
1SS355	5D		

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