

## Switching diode

### • Applications

High speed switching

### • Features

- 1) Small surface mounting type.
- 2) High Speed.(trr =1.2ns Typ.)
- 3) High reliability with high surge current handling capability.
- 4) RoHS product for packing code suffix "G",  
Halogen free product for packing code suffix "H".
- 5) Weight :0.01g

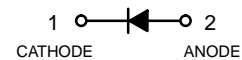
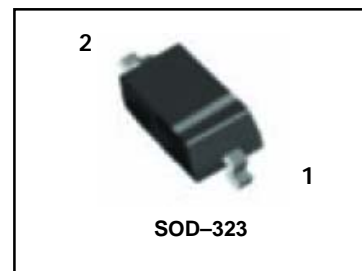
### • Construction

Silicon epitaxial planar

### • Device Marking and Ordering Information

Device	Marking	Shipping
1SS355	5D	3000/Tape&Reel

## 1SS355



### • Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V <sub>RM</sub>	90	V
DC reverse voltage	V <sub>R</sub>	80	V
Peak forward current	I <sub>FM</sub>	225	mA
Mean rectifying current	I <sub>O</sub>	100	mA
Surge current (1s)	I <sub>surge</sub>	500	mA
Junction temperature	T <sub>J</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55~+125	°C

### • Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditons
Forward voltage	V <sub>F</sub>	-	-	1.2	V	I <sub>F</sub> =100mA
Reverse current	I <sub>R</sub>	-	-	0.1	μA	V <sub>R</sub> =80V
Capacitance between terminals	C <sub>T</sub>	-	-	3.0	pF	V <sub>R</sub> =0.5V, f=1MHz
Reverse recovery time	t <sub>rr</sub>	-	-	4	ns	V <sub>R</sub> =6V, I <sub>F</sub> =10mA, R <sub>L</sub> =100Ω

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

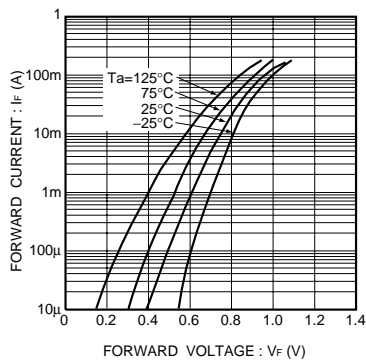


Fig.1 Forward characteristics

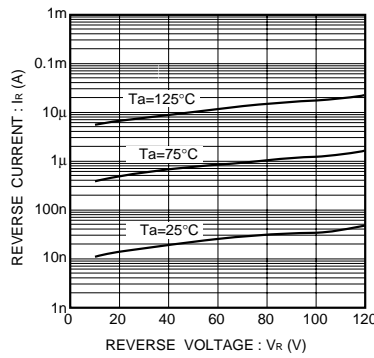


Fig.2 Reverse characteristics

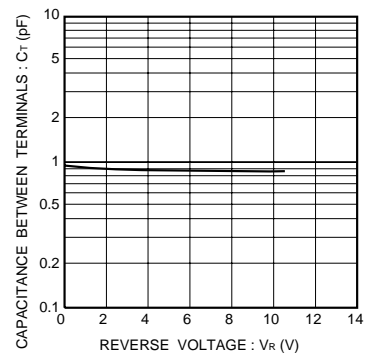


Fig.3 Capacitance between terminals characteristics

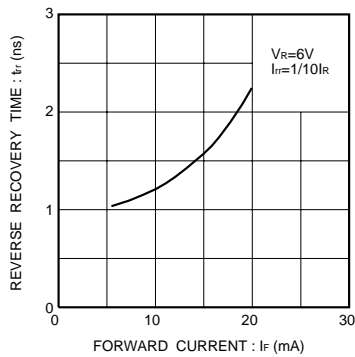


Fig.4 Reverse recovery time characteristics

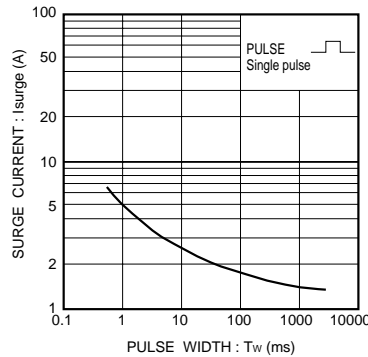


Fig.5 Surge current characteristics

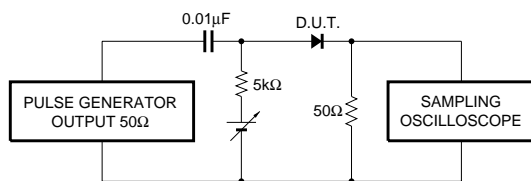
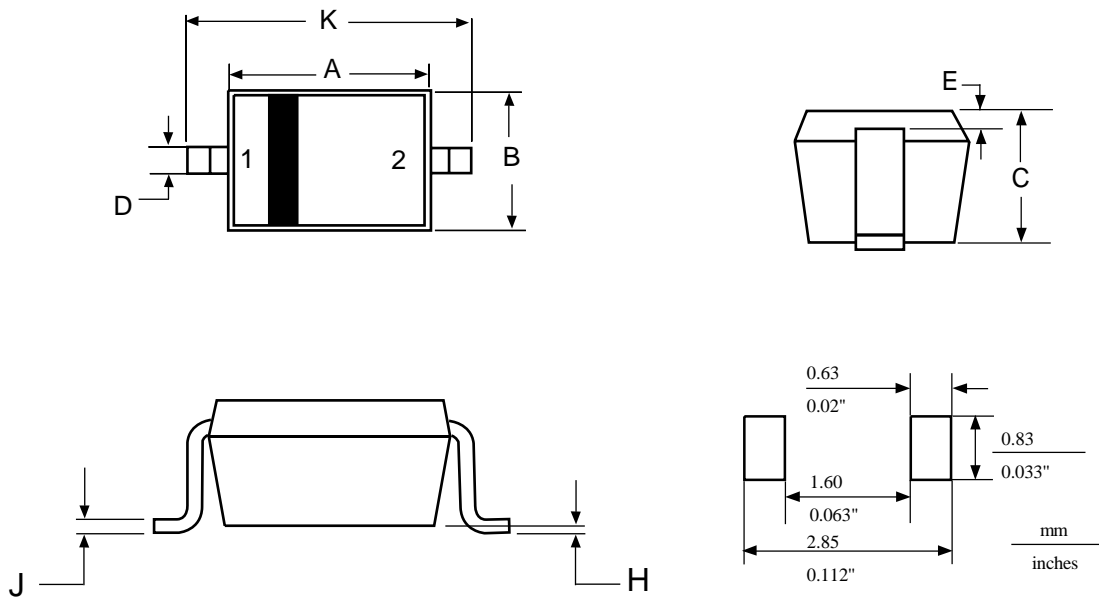


Fig.6 Reverse recovery time ( $t_{rr}$ ) measurement circuit

1SS355

SOD-323



**NOTES:**

1. DIMENSIONING AND TOLERANCING  
PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.80	0.063	0.071
B	1.15	1.40	0.045	0.055
C	0.80	1.00	0.031	0.039
D	0.25	0.40	0.010	0.016
E	0.15 REF		0.006 REF	
H	0.00	0.10	0.000	0.004
J	0.089	0.177	0.0035	0.0070
K	2.30	2.70	0.091	0.106

PIN:1:CATHODE  
2:ANODE