

## 1SS355

### SILICON EPITAXIAL HIGH SPEED SWITCHING DIODE

#### Features

- Small plastic package suitable for surface mounted design
- High Speed ( $T_{rr} = 1.2 \text{ ns Typ.}$ )
- High reliability with high surge current handling capability
- RoHS compliant package

#### Applications

- High speed switching

#### Description

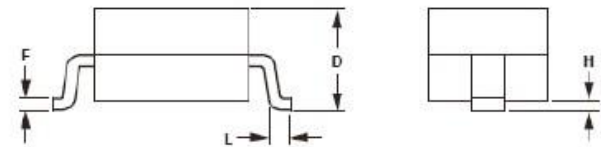
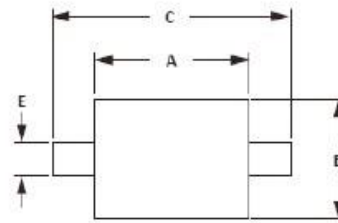
- Silicon planar zener diode in a small plastic SMD SOD-323 package

#### Packing & Order Information

3,000/Reel



**RoHS  
COMPLIANT**



OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.39	2.70	0.094	0.106
D	0.80	1.10	0.031	0.043
E	0.25	0.40	0.010	0.016
F	0.10	0.20	0.004	0.008
H	-	0.10	-	0.004
L	0.20	-	0.008	-

NOTES  
 1. Controlling dimension: millimeters.  
 2. Dimensioning and tolerances per ANSI Y14.5M, 1985.  
 3. Dimensions are exclusive of mold flash and metal burrs.

Graphic symbol



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	VRRM	90	V
Maximum DC Reverse Voltage	VRM	80	V
Maximum Average Forward Current	IF	100	mA
Maximum Peak Forward Voltage	IFM	255	mA
Maximum Surge Current (1s)	IFSM	500	mA
Maximum Junction Temperature	TJ	125	°C
Storage temperature range	TS	-55 to +175	°C

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#### Electrical characteristics (T<sub>c</sub>=25°C unless otherwise noted)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	I <sub>F</sub> = 100 mA	VF	--	--	1.2	V
Reverse Current	V <sub>R</sub> = 80 V	IR	--	--	0.1	μA
Capacitance between terminals	f = 1MHz ; V <sub>R</sub> = 0.5	CT	--	--	3.0	pF
Reverse Recovery Time	I <sub>F</sub> = 10 mA , V <sub>R</sub> = 6 V R <sub>L</sub> = 100 Ω	T <sub>rr</sub>	--	--	4.0	ns

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#### ■ RATING AND CHARACTERISTIC CURVES ( 1SS355 )

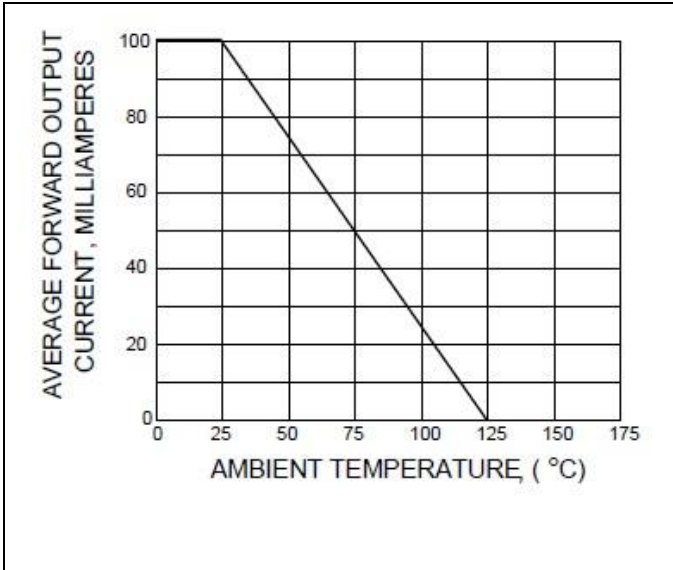


FIG.1- FORWARD CURRENT DERATING CURVE

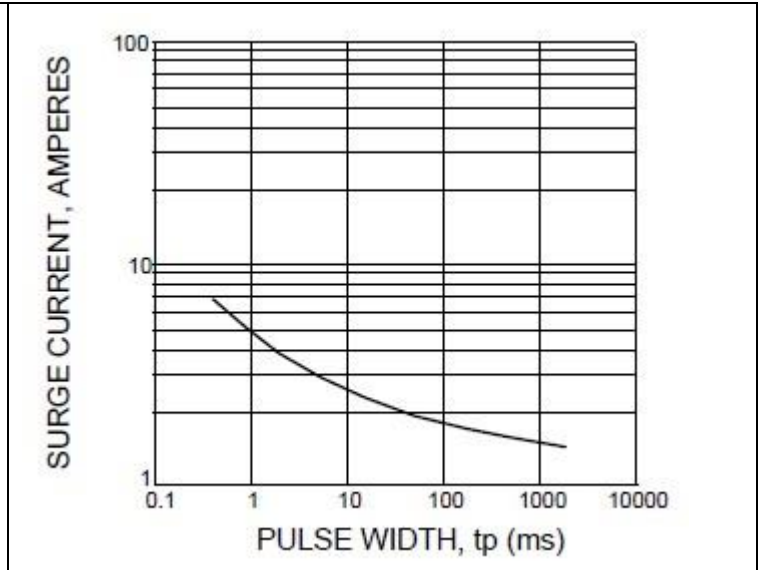


FIG.2- MAXIMUM SURGE CURRENT

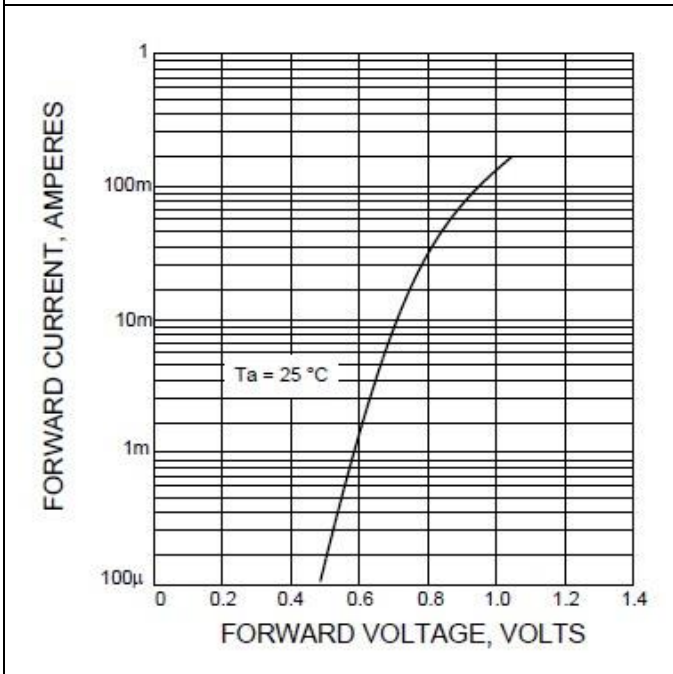


FIG.3- TYPICAL FORWARD CHARACTERISTICS

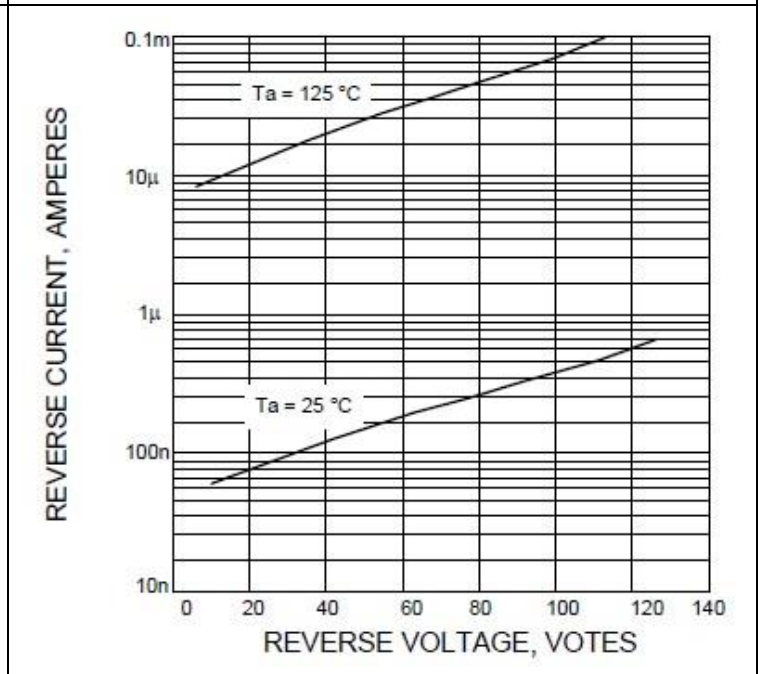


FIG.4- TYPICAL REVERSE CHARACTERISTICS

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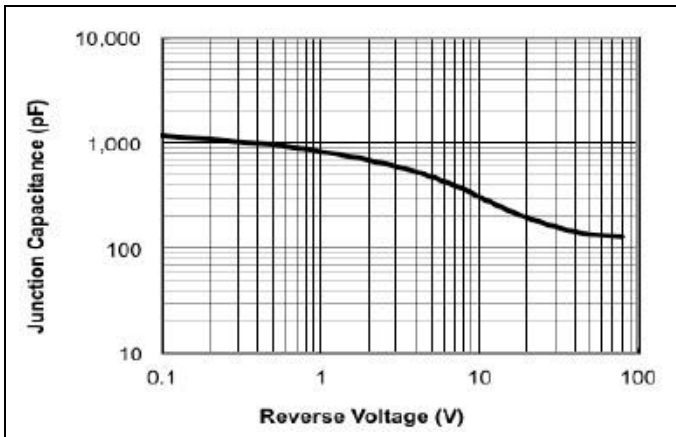


FIG.5- TYPICAL JUNCTION CAPACITANCE

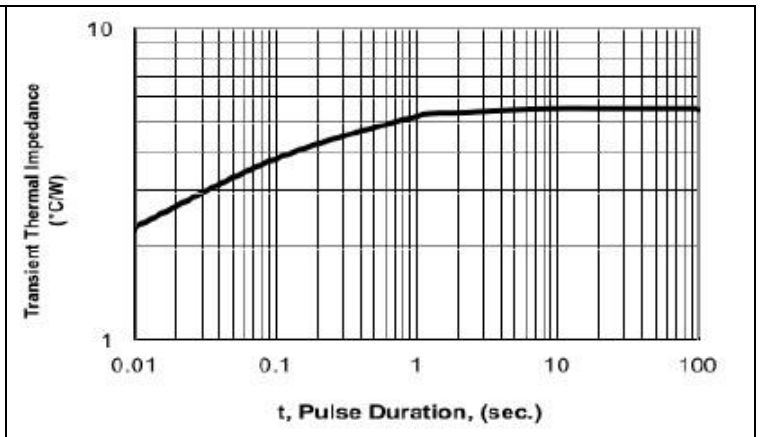


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE

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