

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

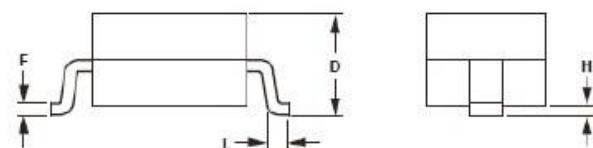
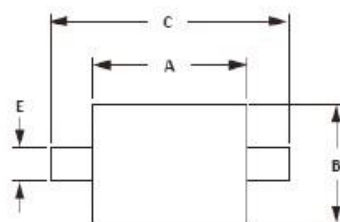
SOD-323 package

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 (Tc=25°C unless otherwise noted)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	$I_F = 100 \text{ mA}$	VF	--	--	1.2	V
Reverse Current	$V_R = 80 \text{ V}$	IR	--	--	0.1	μA
Capacitance between terminals	$f = 1\text{MHz}$; $V_R = 0.5$	CT	--	--	3.0	pF
Reverse Recovery Time	$I_F = 10 \text{ mA}$, $V_R = 6 \text{ V}$ $R_L = 100 \Omega$	Trr	--	--	4.0	ns

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■ RATING AND CHARACTERISTIC CURVES (1SS355)

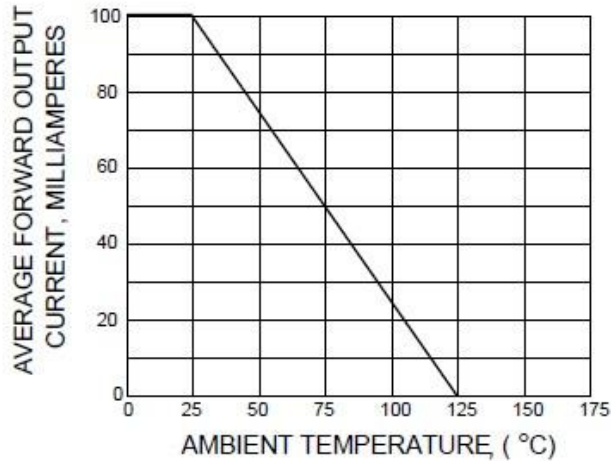


FIG.1- FORWARD CURRENT DERATING CURVE

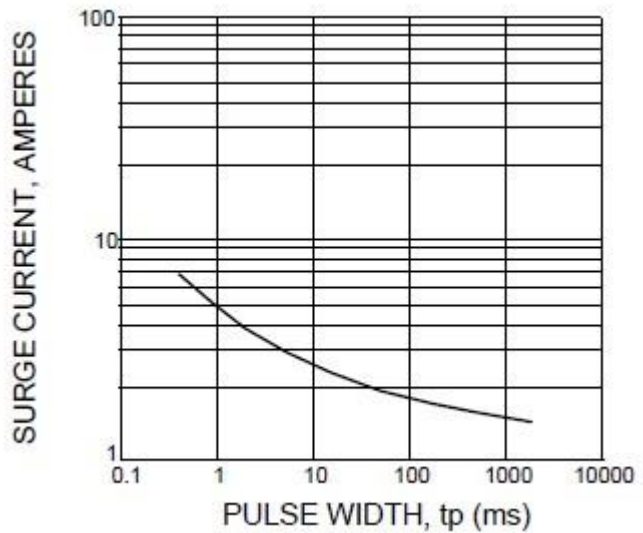


FIG.2- MAXIMUM SURGE CURRENT

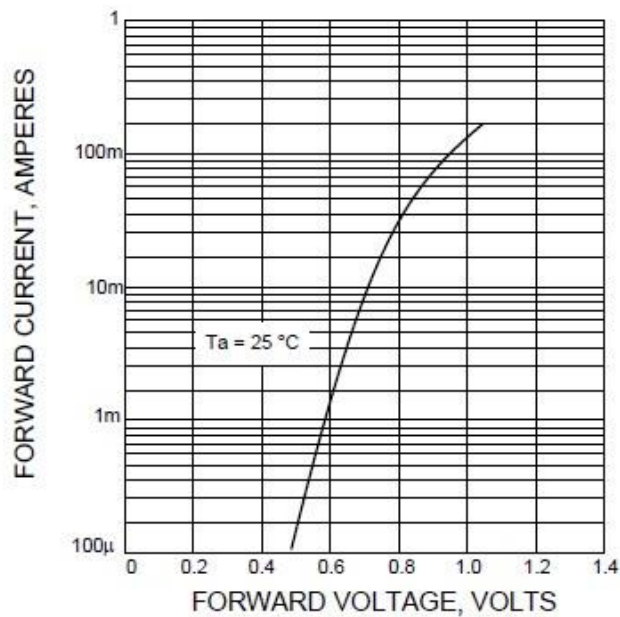


FIG.3- TYPICAL FORWARD CHARACTERISTICS

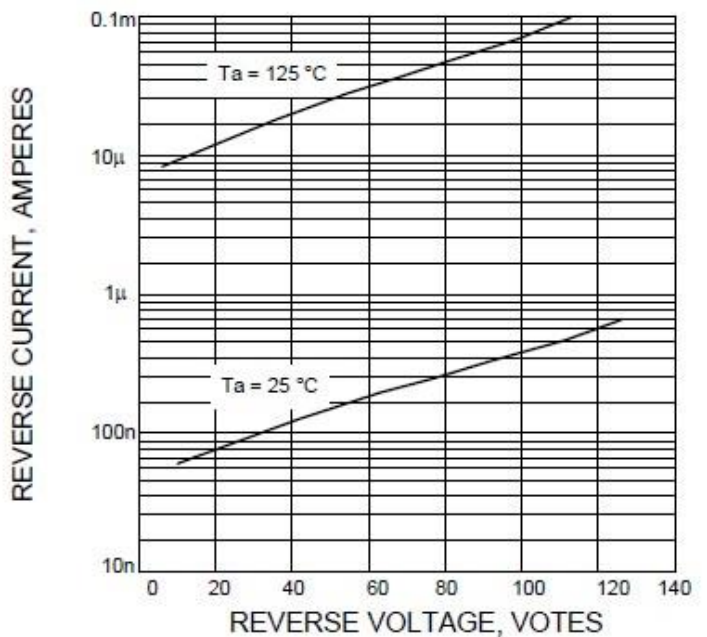


FIG.4- TYPICAL REVERSE CHARACTERISTICS

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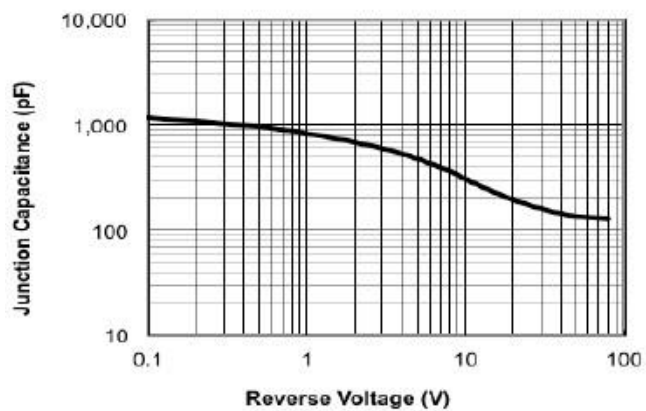


FIG.5- TYPICAL JUNCTION CAPACITANCE

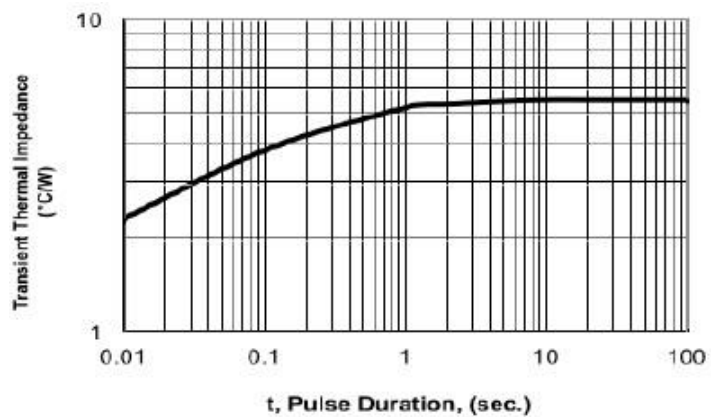


FIG.6- TYPICAL TARNSIENT THERMAL IMPEDANCE

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