

1SS355

SILICON EPITAXIAL PLANAR SWITCHING DIODES

FEATURES

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

APPLICATIONS

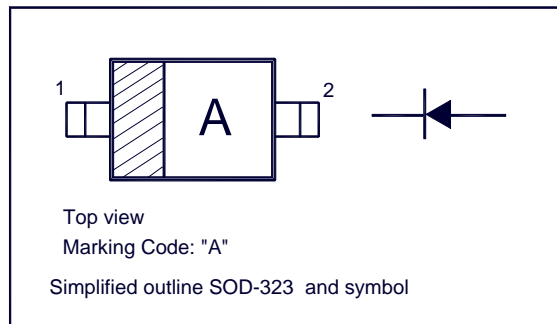
- High speed switching

DESCRIPTION

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

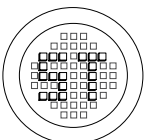


Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	90	V
DC reverse voltage	V_R	80	V
Peak forward current	I_{FM}	225	mA
Mean rectifying current	I_o	100	mA
Surge current (1s)	I_{surge}	500	mA
Junction temperature	T_J	125	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55 ... +125	$^{\circ}\text{C}$

Electrical Characteristics ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F	-	-	1.2	V	$I_F = 100\text{mA}$
Reverse current	I_R	-	-	0.1	μA	$V_R = 80\text{V}$
Capacitance between terminals	C_T	-	-	3.0	pF	$V_R = 0.5\text{V}, f = 1\text{MHz}$
Reverse recovery time	t_{rr}	-	-	4	ns	$V_R = 6\text{V}, I_F = 10\text{mA}, R_L = 100\Omega$

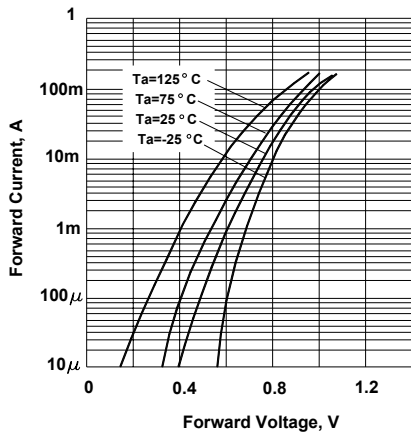


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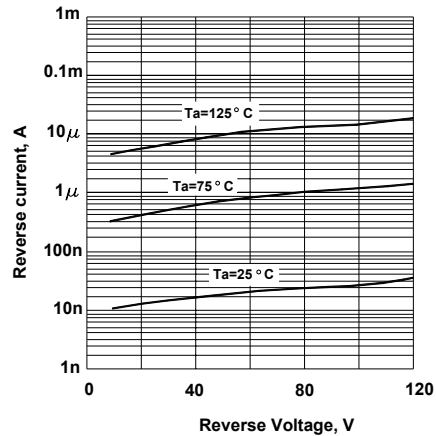
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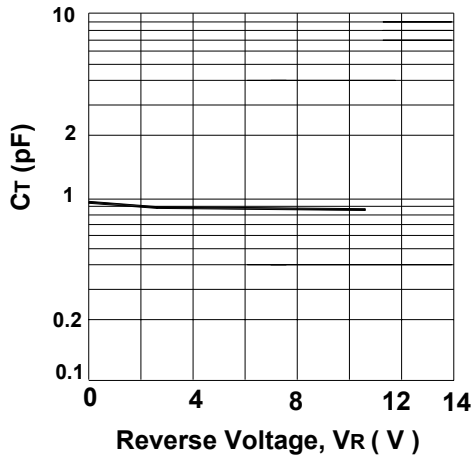
Forward Characteristics



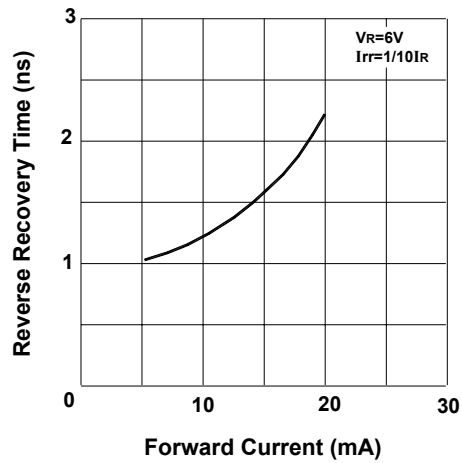
Reverse Characteristics



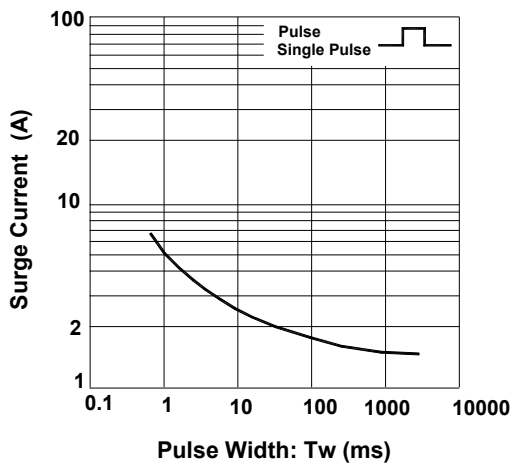
Capacitance between terminals characteristics



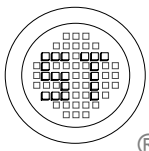
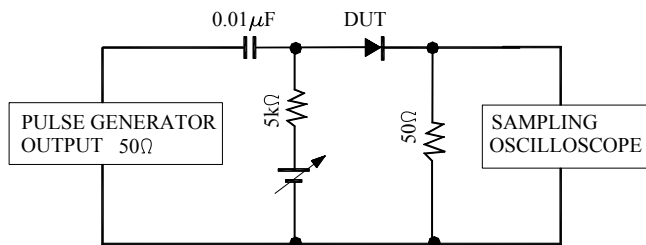
Reverse Recovery Time Characteristics



Surge Current Characteristics

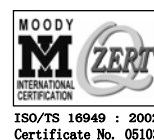


Reverse Recovery Time Measurement Circuit



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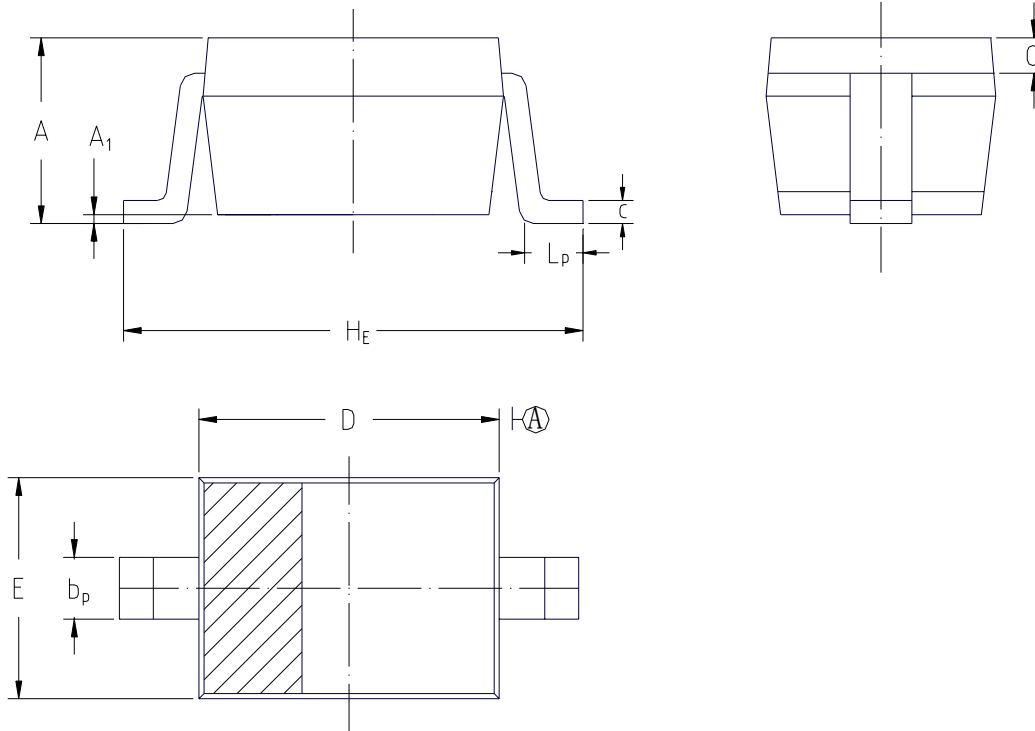


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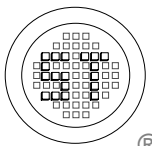
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	A ₁	b _p	c	D	E	H _E	L _p	Q
mm	1.10 0.80	0.1 0	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30	0.50 0.10	0.15 REF.



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
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ISO 9001 : 2000
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