

1SS355

SILICON EPITAXIAL PLANAR SWITCHING DIODES

FEATURES

- Small plastic package suitable for surface mounted design
- High reliability with high surge current handling capability

APPLICATIONS

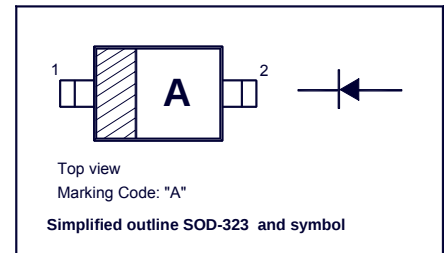
- High speed switching

DESCRIPTION

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

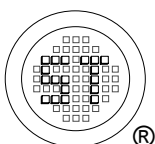


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	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 (1 s)	I_{surge}	500	mA
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	V_F	1.2	V
Reverse Current at $V_R = 80\text{ V}$	I_R	0.1	μA
Capacitance between Terminals at $V_R = 0.5\text{ V}$, $f = 1\text{ MHz}$	C_T	3	pF
Reverse Recovery Time at $V_R = 6\text{ V}$, $I_F = 10\text{ mA}$, $R_L = 100\ \Omega$	t_{rr}	4	ns



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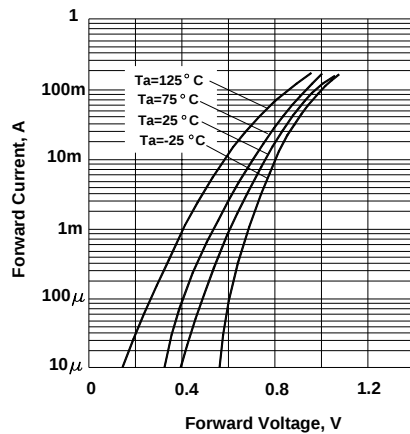
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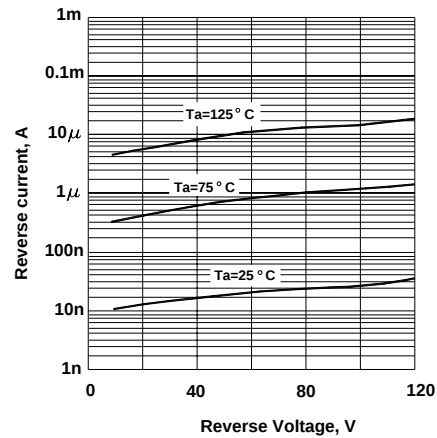
ISO/TS 16949 : 2002 Certificate No. 05103
ISO 14001:2004 Certificate No. 7116
ISO 9001:2000 Certificate No. 0506098

Dated : 12/05/2006

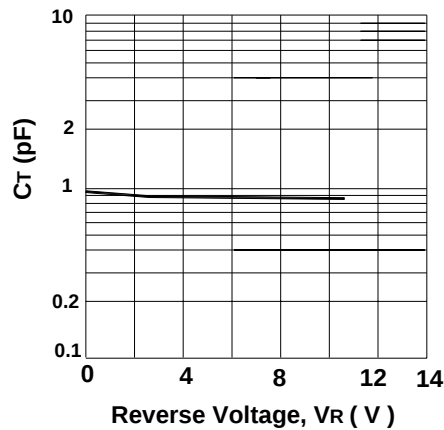
Forward Characteristics



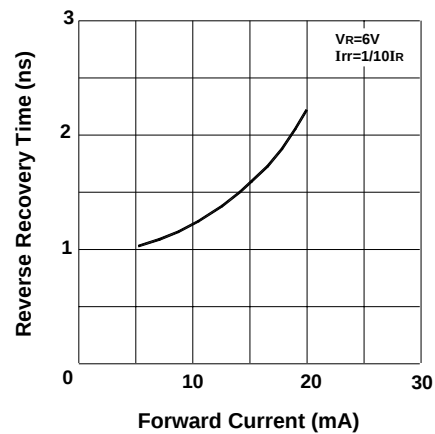
Reverse Characteristics



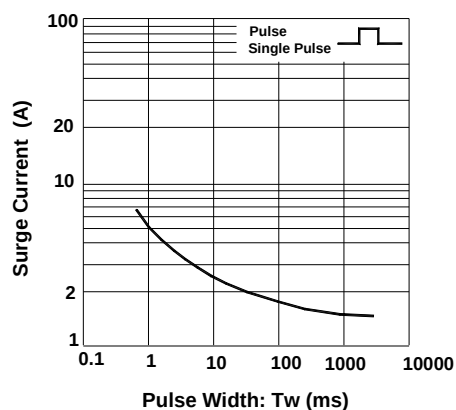
Capacitance between terminals characteristics



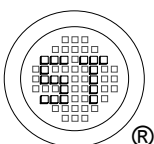
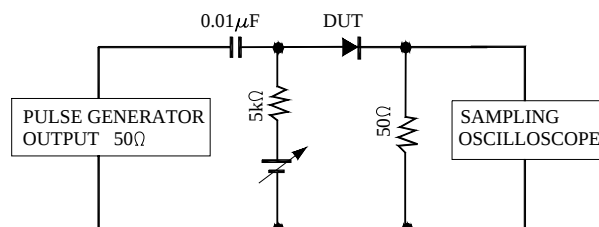
Reverse Recovery Time Characteristics



Surge Current Characteristics



Reverse Recovery Time Measurement Circuit



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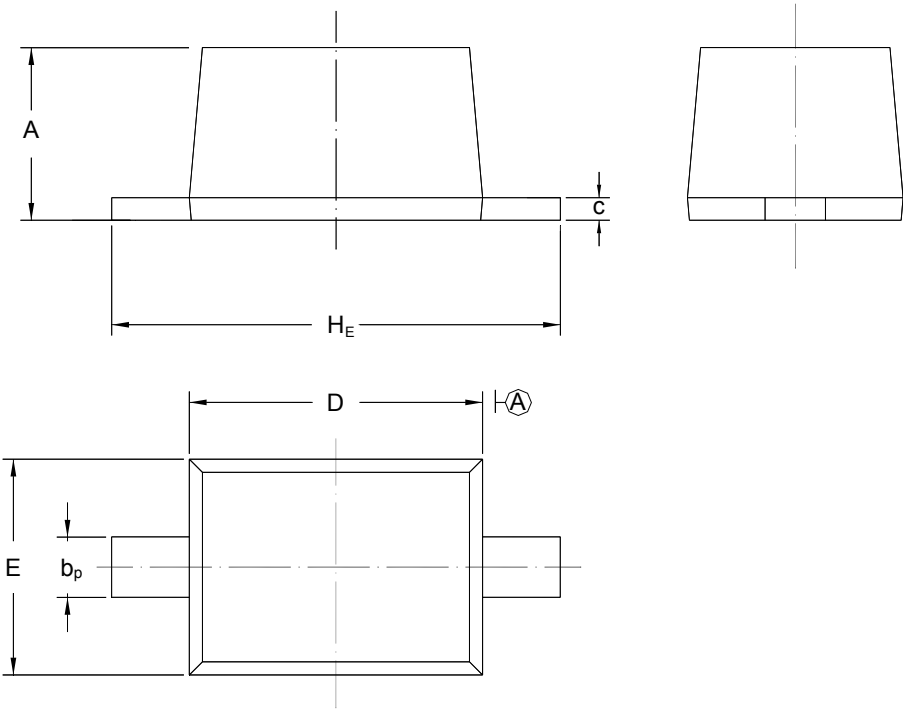
ISO 9001:2000
Certificate No. 0506098

Dated : 12/05/2006

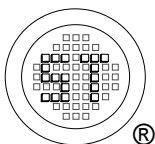
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b _p	C	D	E	H _E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30



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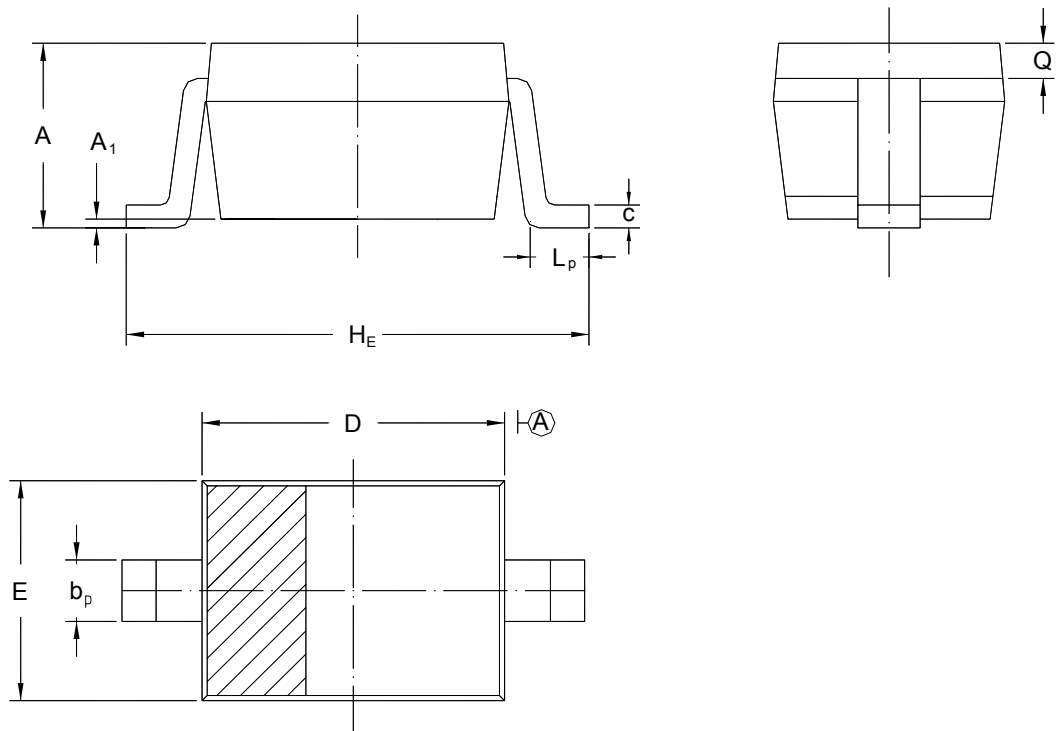


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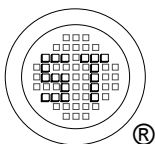
PACKAGE OUTLINE

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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