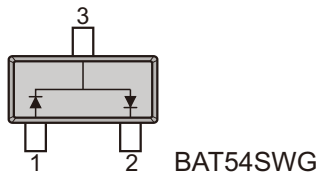
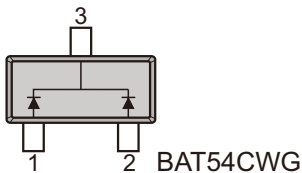
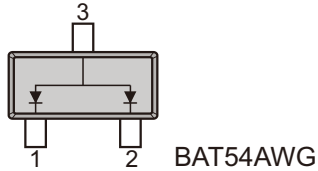
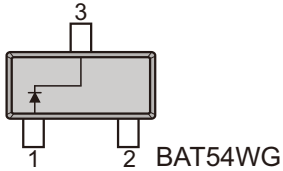




SCHOTTKY BARRIER DIODE

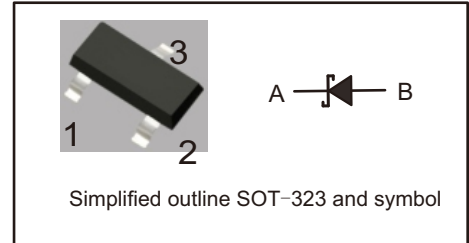
FEATURES

- Extremely Fast Switching Speed



PINNING

PIN	DESCRIPTION
A	Cathode
B	Anode



MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
Forward Continuous Current	I_{FM}	200	mA
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	600	mA
Repetitive Peak Forward Current @ t≤1s, δ≤0.5	I_{FRM}	300	mA
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	R_{thJA}	500	°C/W
Operating Junction Temperature Range	T_j	-40~ +125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V_{BR}	$I_R=100\mu A$	30			V
Reverse current	I_R	$V_R=25V$			2	uA
Forward voltage	V_F	$I_{F1}=0.1mA$			0.24	V
		$I_{F2}=1mA$			0.32	V
		$I_{F3}=10mA$			0.40	V
		$I_{F4}=30mA$			0.50	V
		$I_{F5}=100mA$			1	V
Diode capacitance	C_D	$V_R=4V, f=1MHz$		10		pF
Reverse recovery time	t_{rr}	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$			5	ns



Fig.1 Power Derating Curve

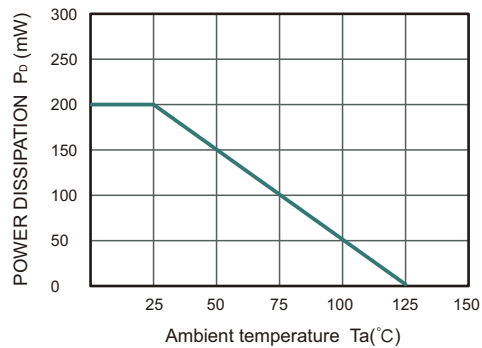


Fig.2 Reverse Characteristics

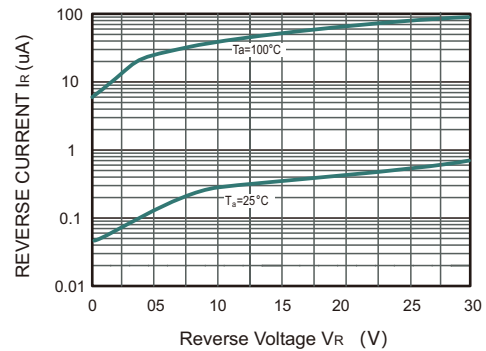


Fig.3 Forward Characteristics

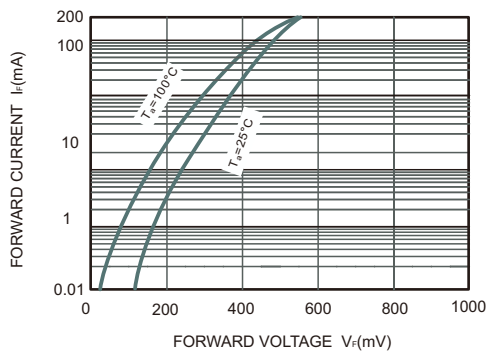
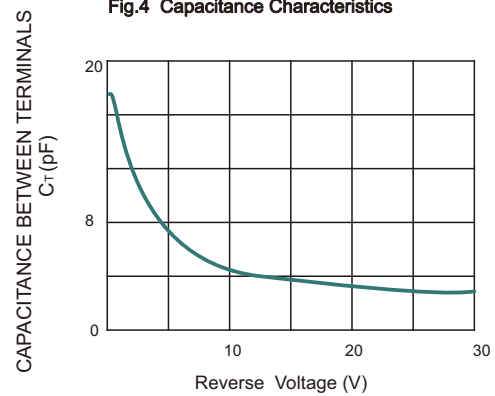
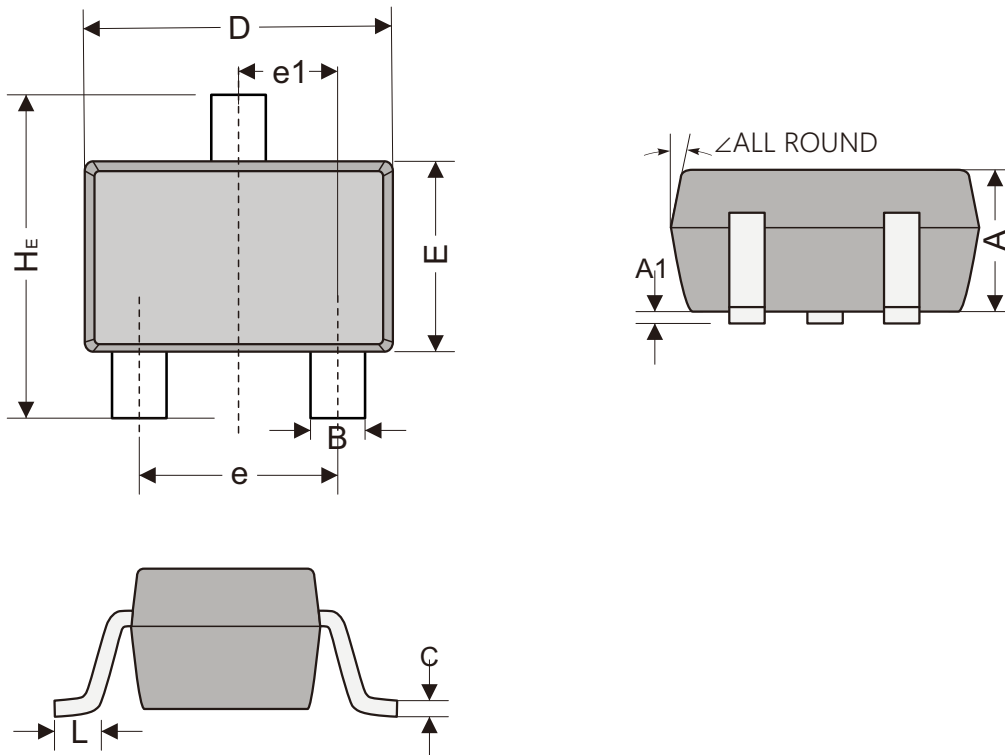


Fig.4 Capacitance Characteristics





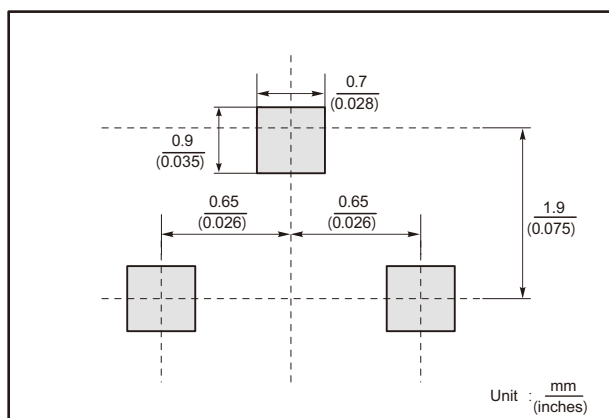
SOT-323 Package Outline Dimensions



SOT-323 mechanical data

UNIT		A	A1	B	C	D	E	e	e1	L	HE
mm	max	1.00	0.10	0.40	0.25	2.20	1.35	1.40	0.65 (BSC)	0.425 REF	2.40
	min	0.80	0.00	0.30	0.10	1.80	1.15	1.20			2.00
mil	max	39.37	3.94	15.75	9.84	86.61	53.15	55.12	25.59 (BSC)	16.73 REF	94.49
	min	31.50	0.00	11.81	3.94	70.87	45.28	47.24			78.74

The recommended mounting pad size



Marking

Type number	Marking code
BAT54WG	KL1
BAT54AWG	KL2
BAT54CWG	KL3
BAT54SWG	KL4



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