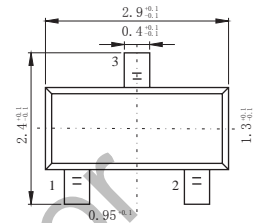
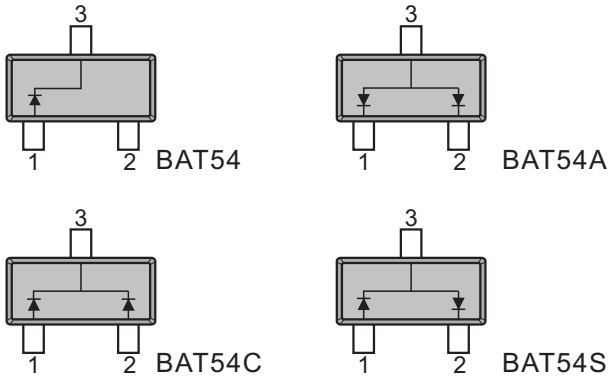




SOT-23

FEATURES

- Extremely Fast Switching Speed



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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
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

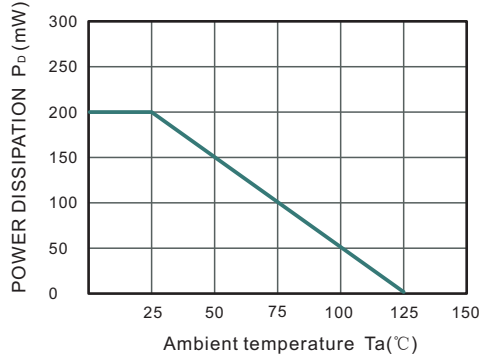


Fig.2 Reverse Characteristics

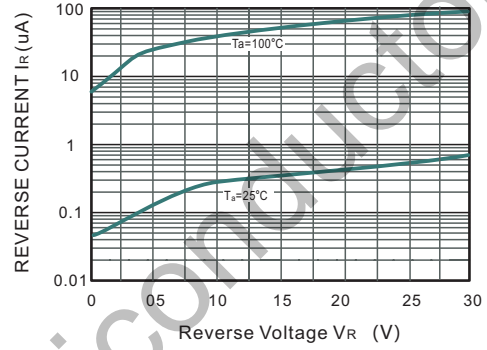


Fig.3 Forward Characteristics

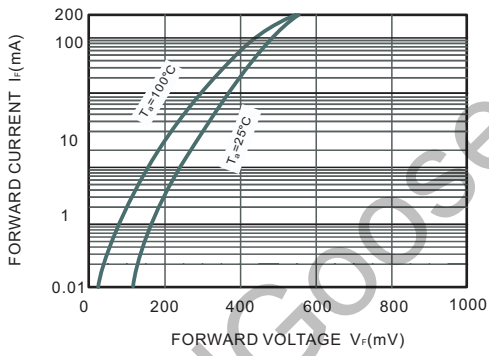
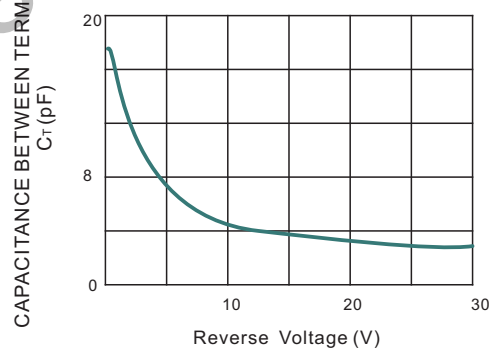
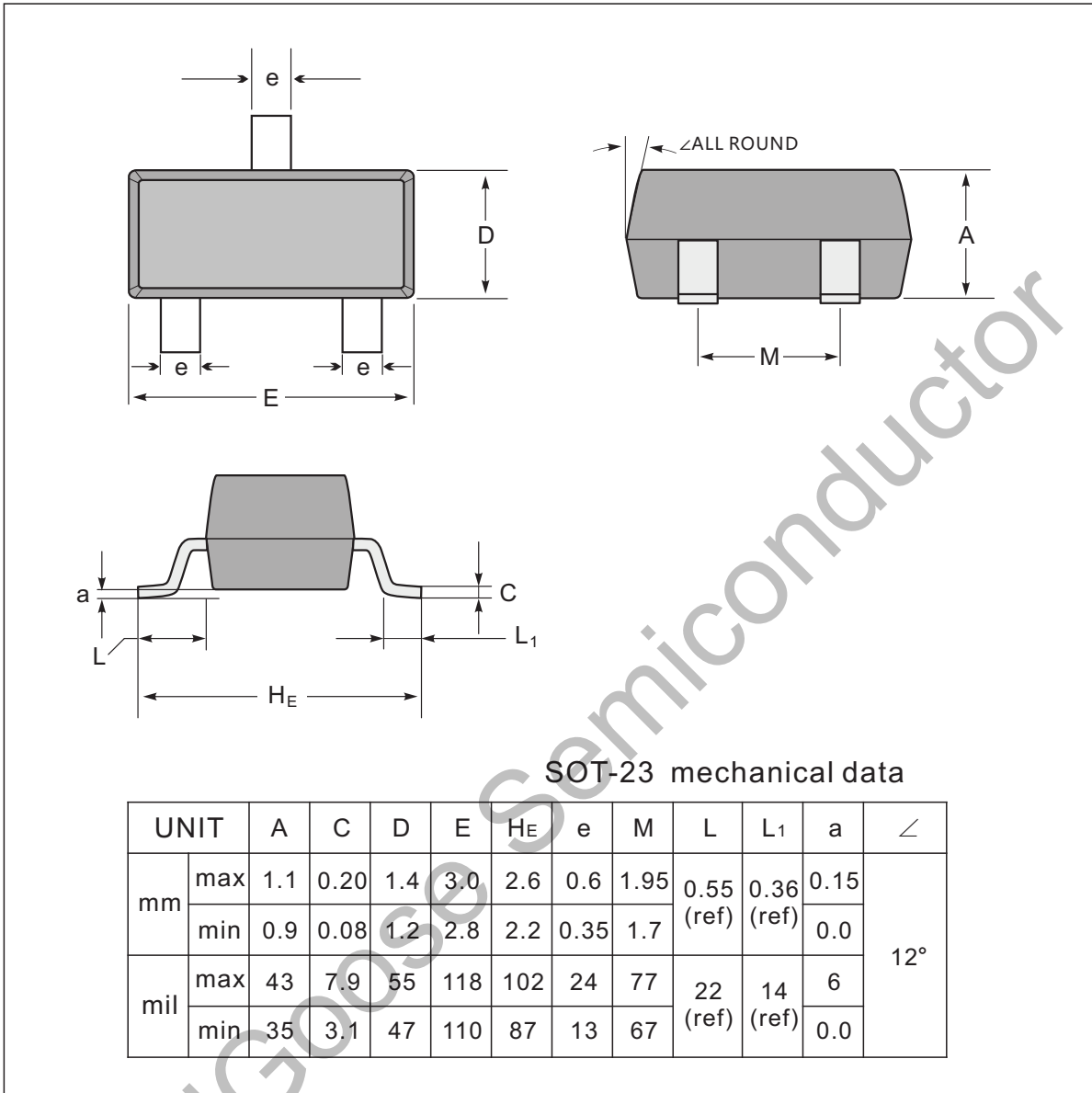


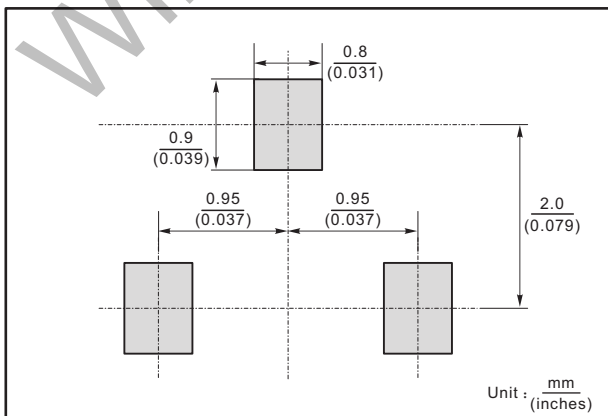
Fig.4 Capacitance Characteristics



SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
BAT54	KL1
BAT54A	KL2
BAT54C	KL3
BAT54S	KL4