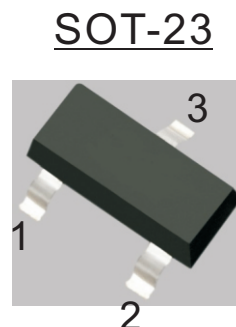
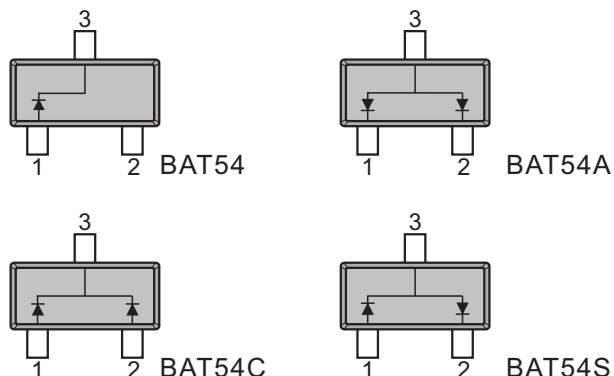




**SCHOTTKY BARRIER DIODE  
FEATURES**

- 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

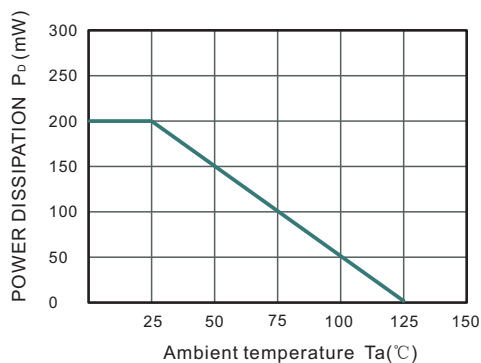


Fig.2 Reverse Characteristics

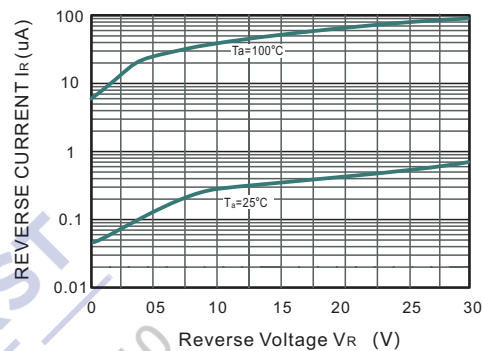


Fig.3 Forward Characteristics

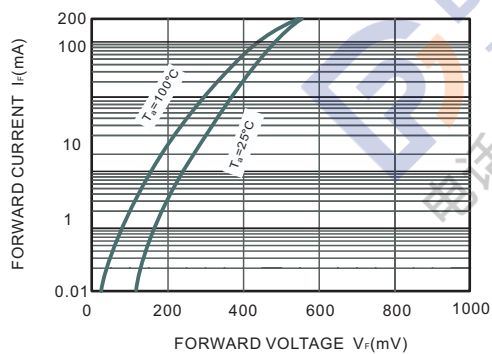
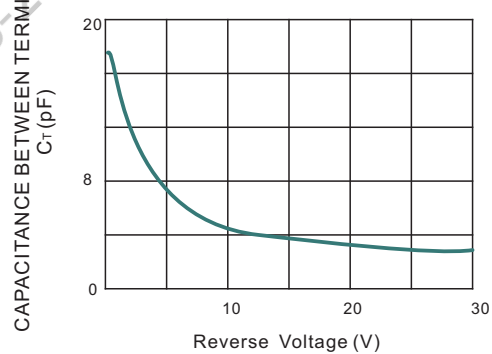
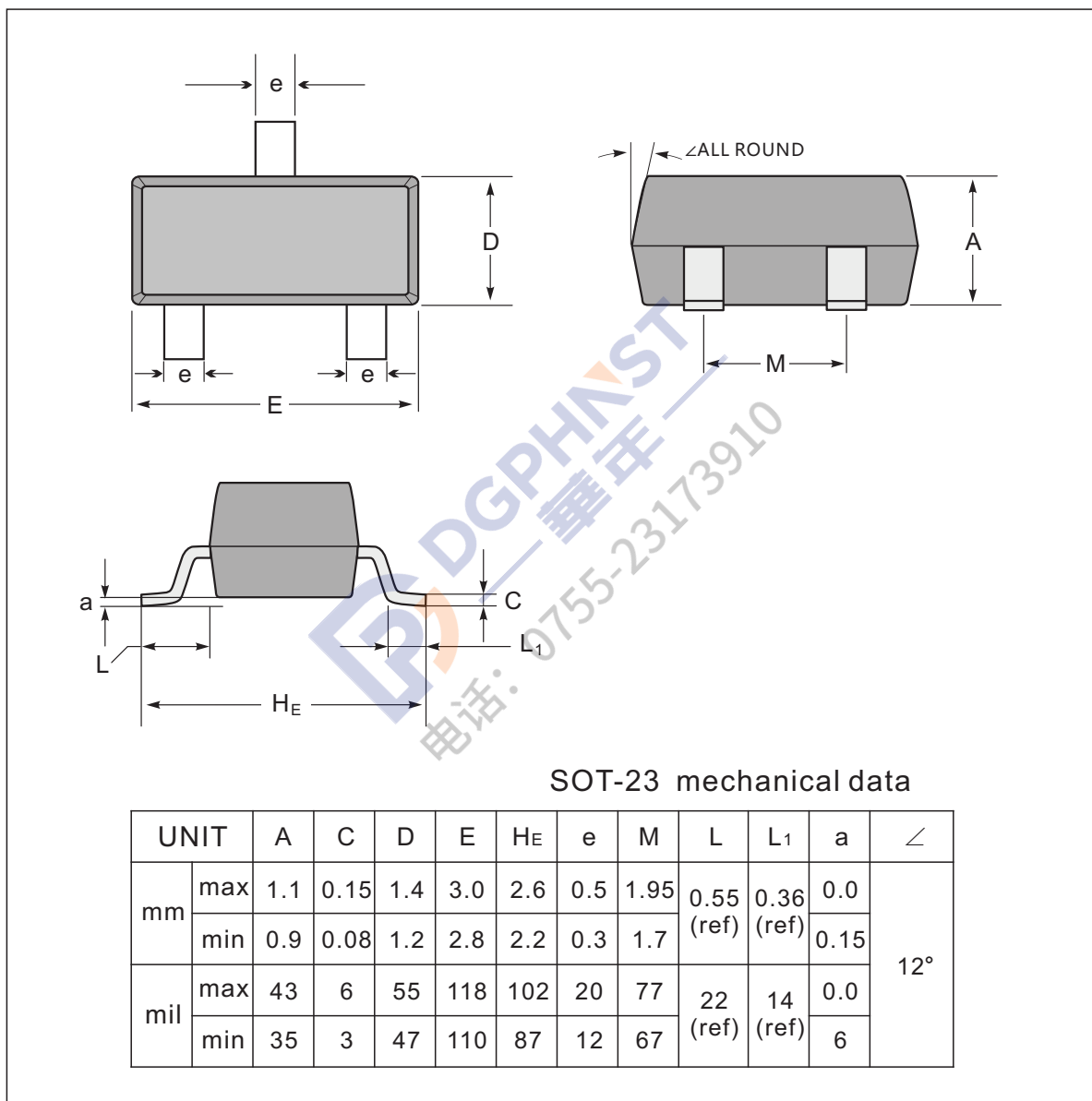


Fig.4 Capacitance Characteristics

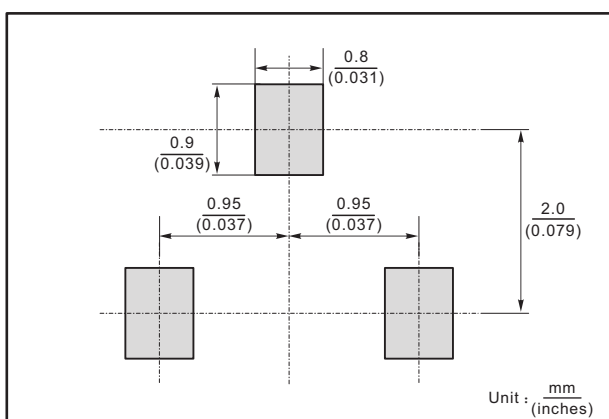




### SOT-23 Package Outline Dimensions



#### The recommended mounting pad size



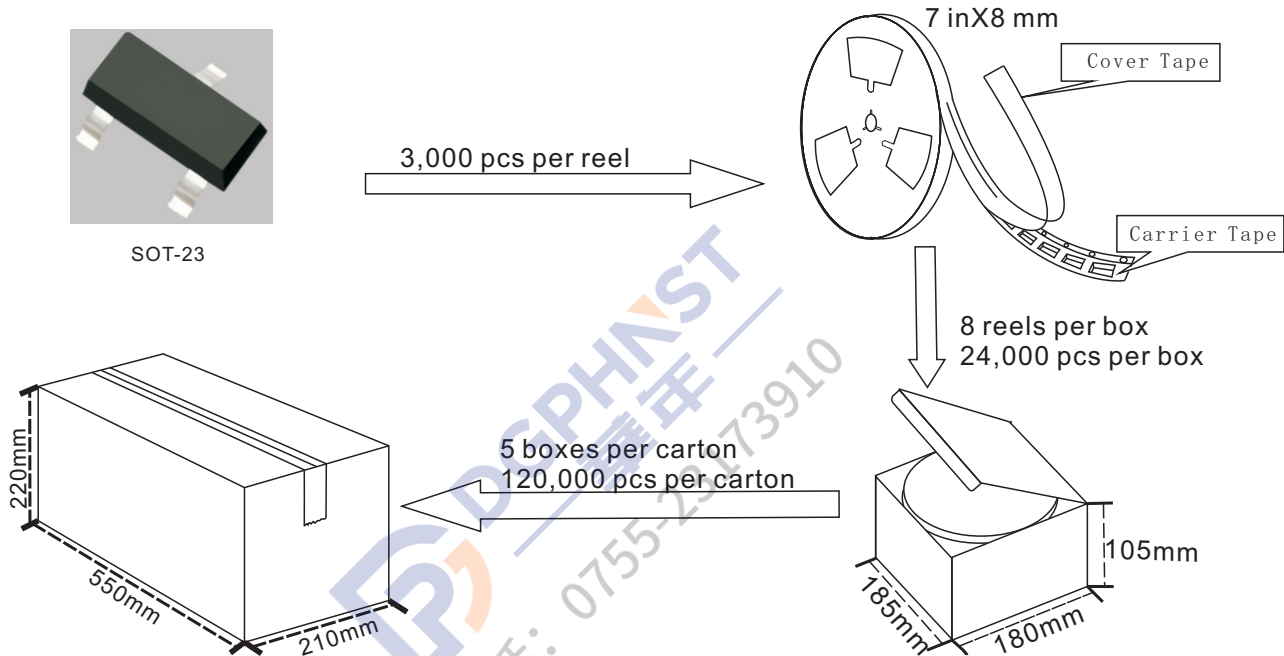
#### Marking

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

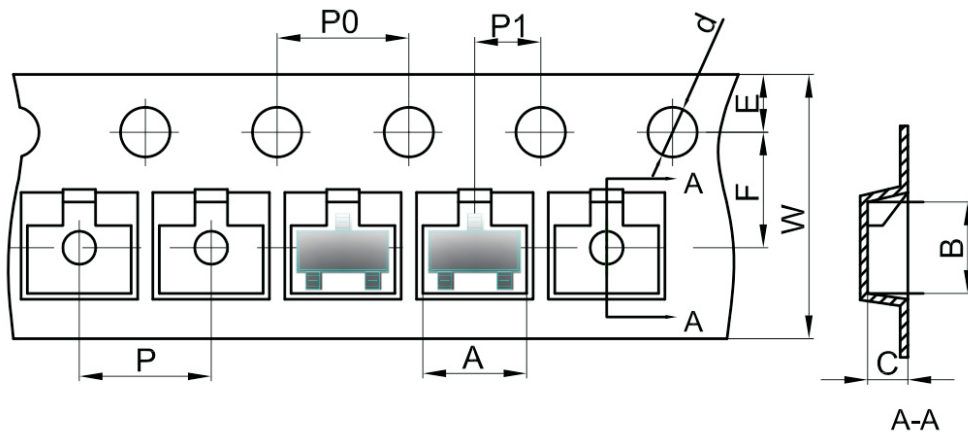


## SOT-23 Packing

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)



### SOT-23 Embossed Carrier Tape



Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

### SOT-23 Tape Leader and Trailer

