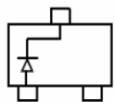
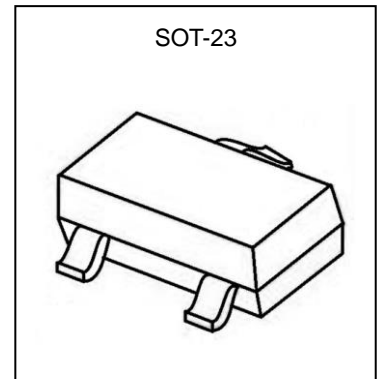


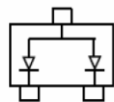
### BAT54/A/C/S Schottky Barrier Diode

#### Feature

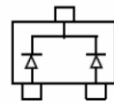
- Extremely Fast Switch Speed
- Low Forward Voltage



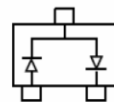
BAT54 MARKING: KL1



BAT54A MARKING: KL2







BAT54C MARKING: KL3



BAT54S MARKING: KL4

#### MARKING:

BAT54	BAT54A	BAT54C	BAT54S
			

#### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

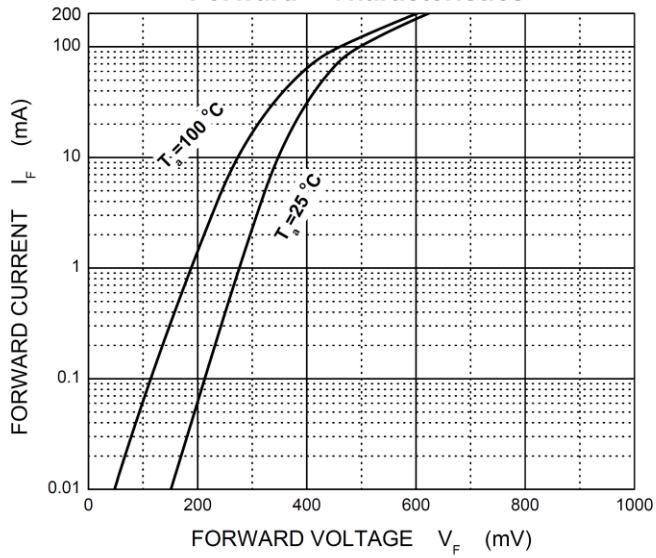
Parameter	Symbol	Value	Unit
DC reverse voltage	$V_R$	30	V
Mean rectifying current	$I_o$	0.2	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	0.6	A
Power Dissipation	$P_D$	0.2	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C/W}$
Junction Temperature	$T_J$	125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55 ~ +150	$^{\circ}\text{C}$

#### ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

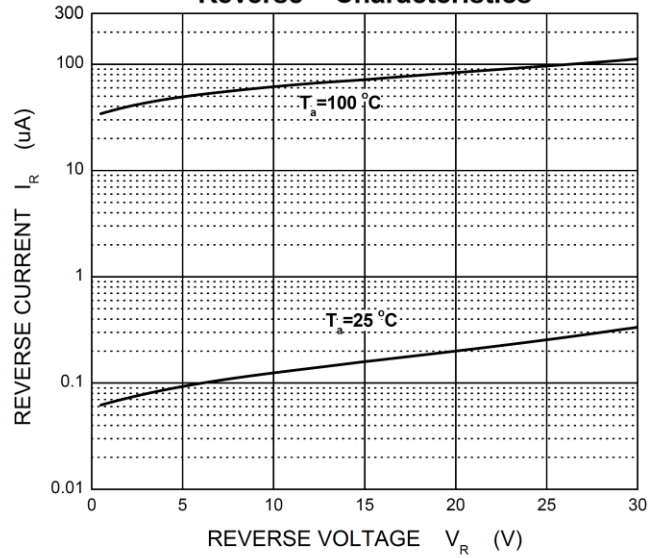
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	30			V
Forward voltage	$V_{F1}$	$I_F=0.1\text{mA}$			0.24	V
	$V_{F2}$	$I_F=1\text{mA}$			0.32	V
	$V_{F3}$	$I_F=10\text{mA}$			0.40	V
	$V_{F4}$	$I_F=30\text{mA}$			0.50	V
	$V_{F5}$	$I_F=100\text{mA}$			1	V
Reverse current	$I_R$	$V_R=25\text{V}$			2	$\mu\text{A}$
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}$ , $I_{rr}=0.1^* I_R$ , $R_L=100\Omega$			5	ns
Capacitance between terminals	$C_T$	$V_R=1\text{V}$ , $f=1\text{MHz}$			10	pF

**Typical Characteristics**

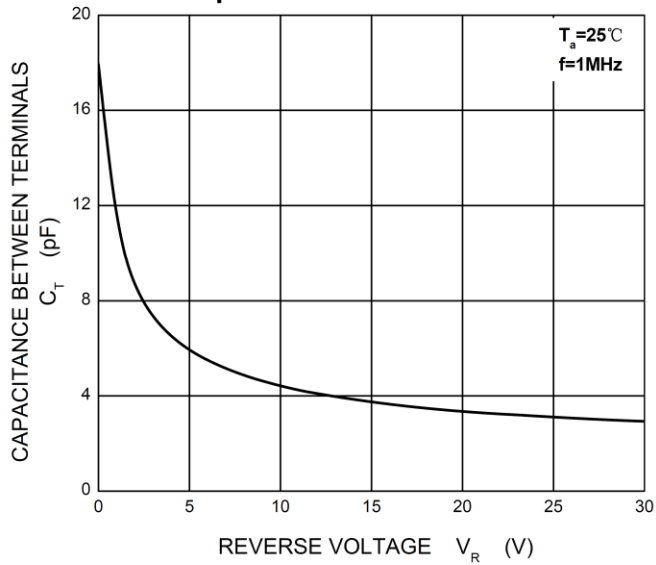
**Forward Characteristics**



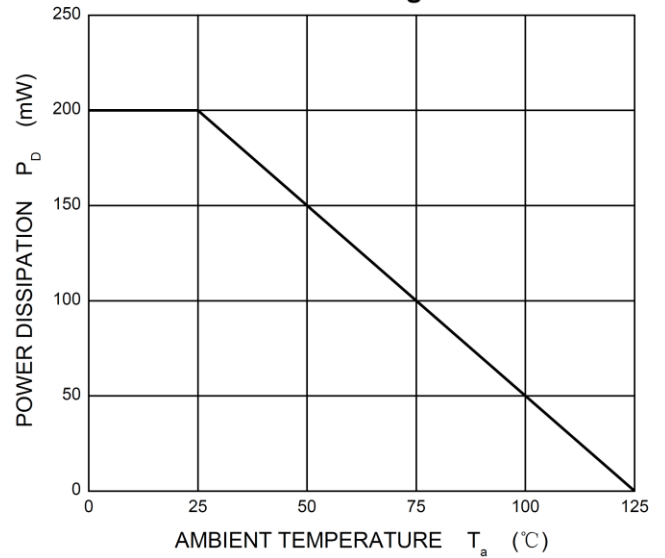
**Reverse Characteristics**



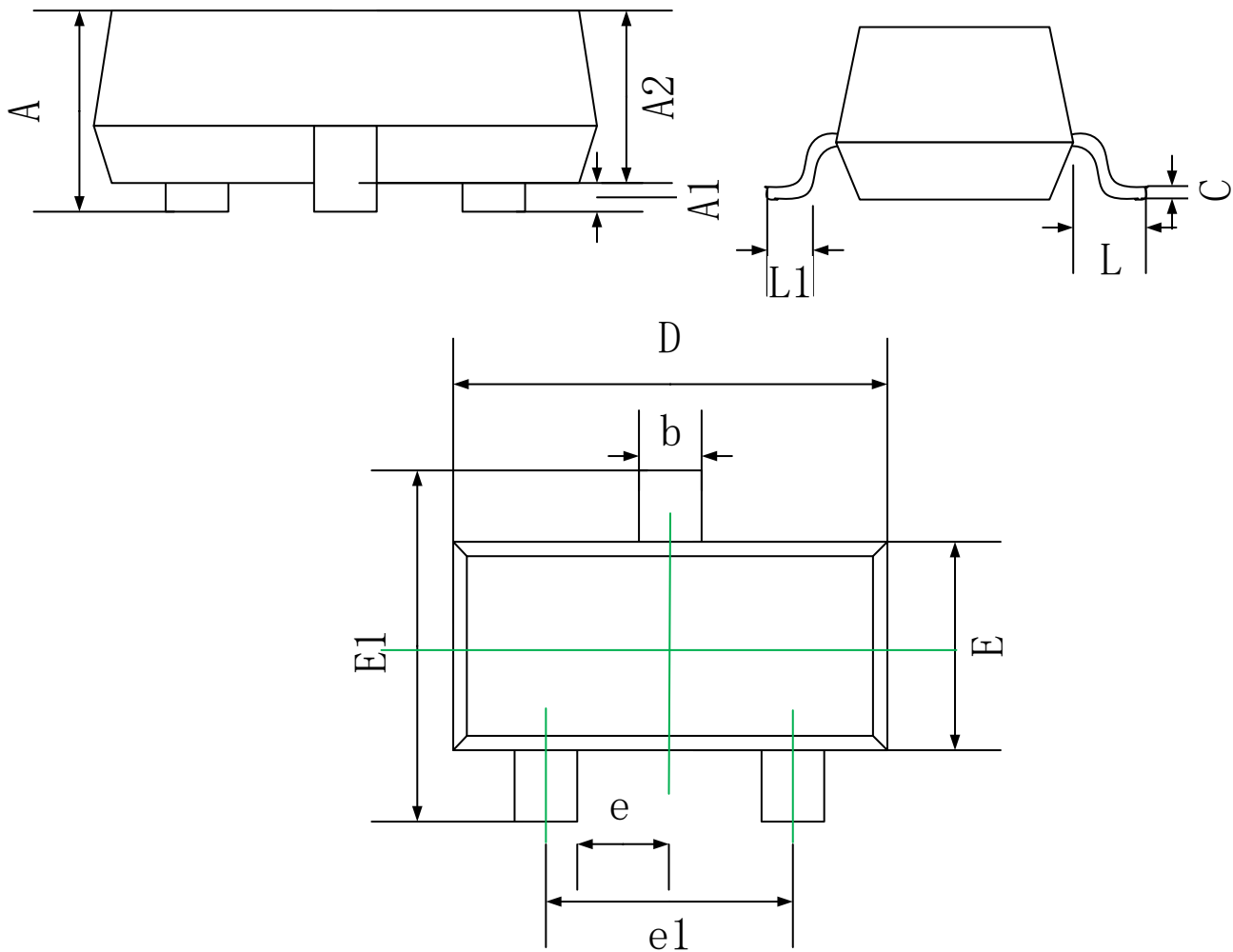
**Capacitance Characteristics**



**Power Derating Curve**



## SOT-23 Package Outline Dimensions

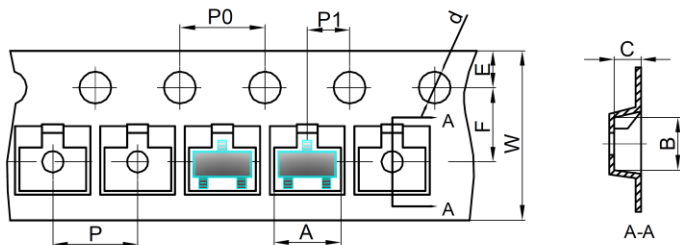


Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95 REF.	
e1	1.80	2.00
L	0.55 REF.	
L1	0.30	0.50

## SOT-23 Tape and Reel

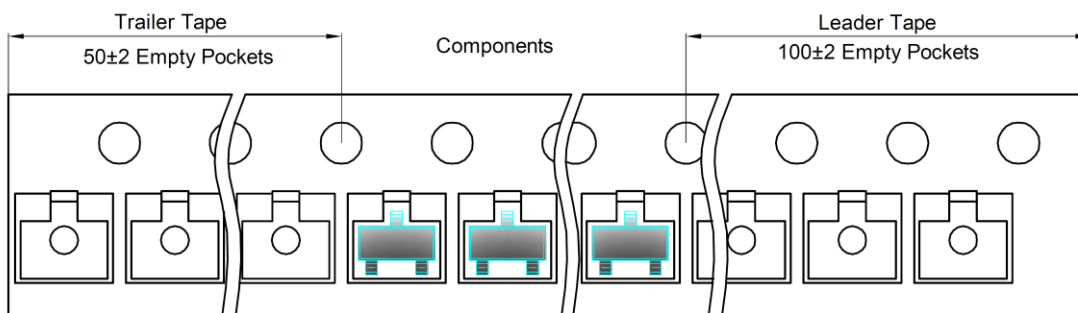
### SOT-23 Tape and reel

SOT-23 Embossed Carrier Tape

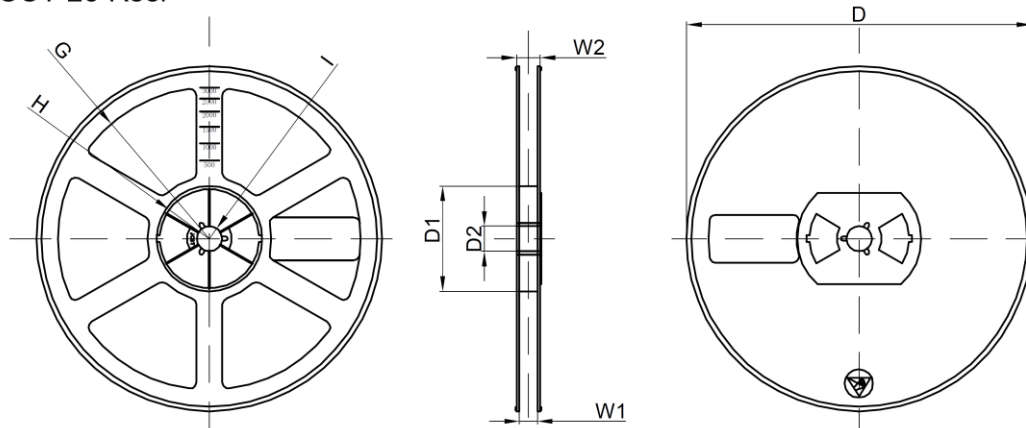


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

### SOT-23 Tape Leader and Trailer



### SOT-23 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	30,000 pcs	203×203×195	120,000 pcs	438×438×220	