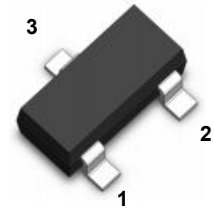
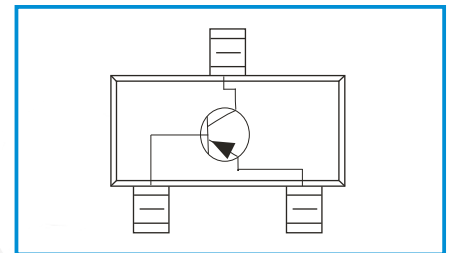


Transistor(PNP)
Features

- General Purpose Amplifier Applications
- Complementary Type NPN Transistor LTBTA06
- **MARKING: 2GM**



1. BASE
2. EMITTER
3. COLLECTOR

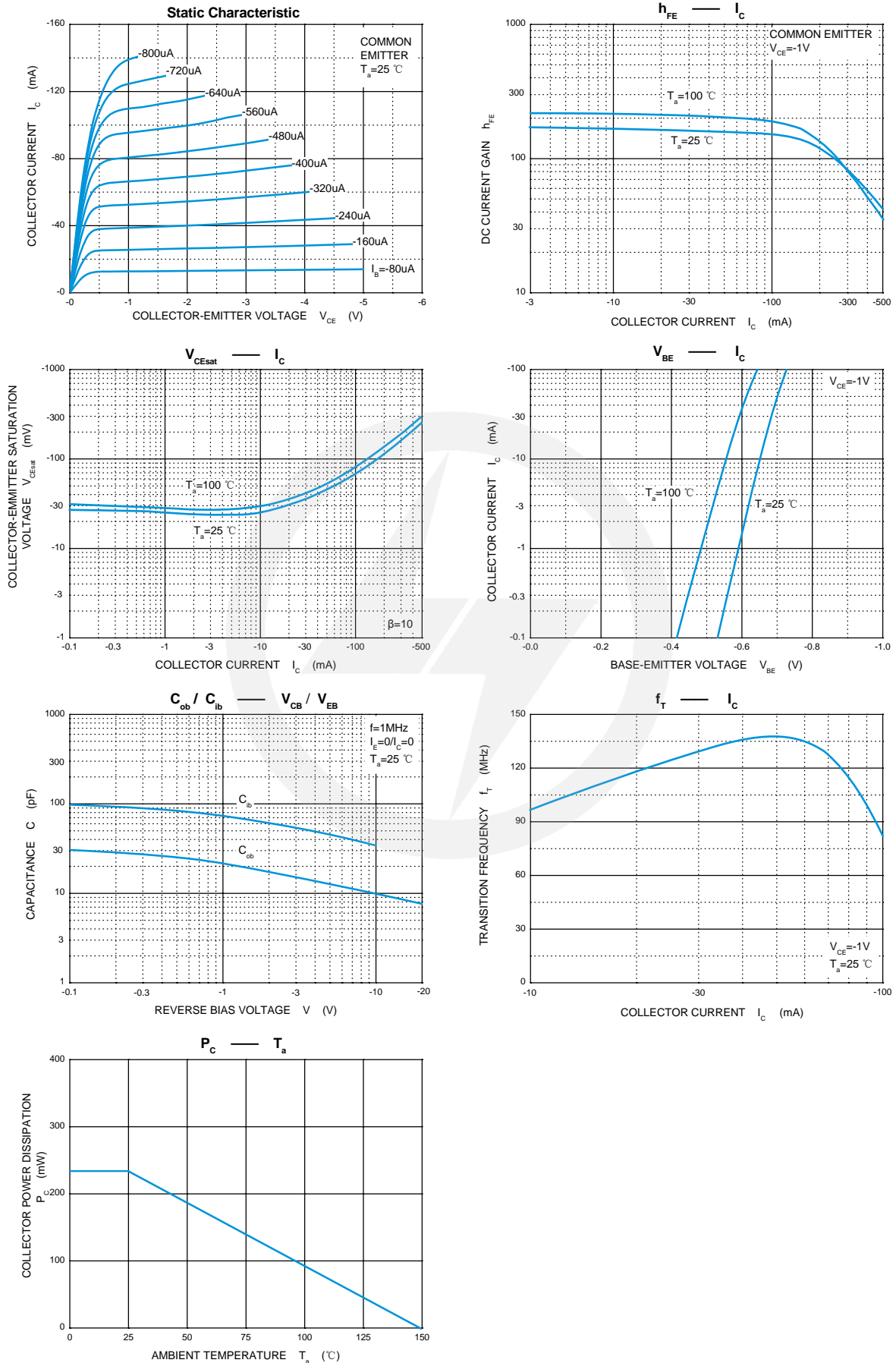
Functional Diagram

Maximum Ratings ($T_a=25$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	-80	V
V_{CE0}	Collector-Emitter Voltage	-80	V
V_{EB0}	Emitter-Base Voltage	-4	V
I_C	Collector Current	-500	mA
P_C	Collector Power Dissipation	225	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	555	$^{\circ}C/W$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}C$

Electrical characteristics ($T_a=25$ unless otherwise specified)

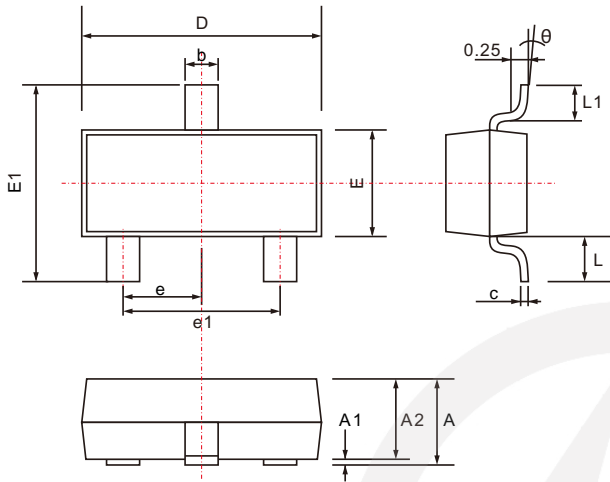
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-4			V
Collector cut-off current	I_{CBO}	$V_{CB}=-80V, I_E=0$			-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=-60V, I_B=0$			-0.1	μA
Emitter-base breakdown voltage	I_{EBO}	$V_{EB}=-4V, I_C=0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE}=-1V, I_C=-10mA$	100		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$			-0.25	V
Base-emitter voltage	V_{BE}	$V_{CE}=-1V, I_C=-100mA$			-1.2	V
Transition frequency	f_T	$V_{CE}=-1V, I_C=-100mA, f=100MHz$	50			MHz

Typical Characteristics



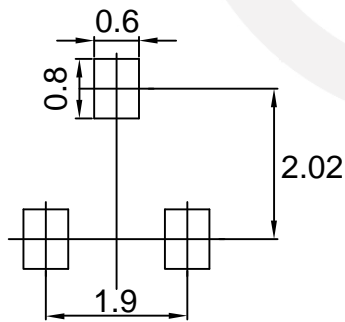
SOT-23 Package Outline

Unit: mm



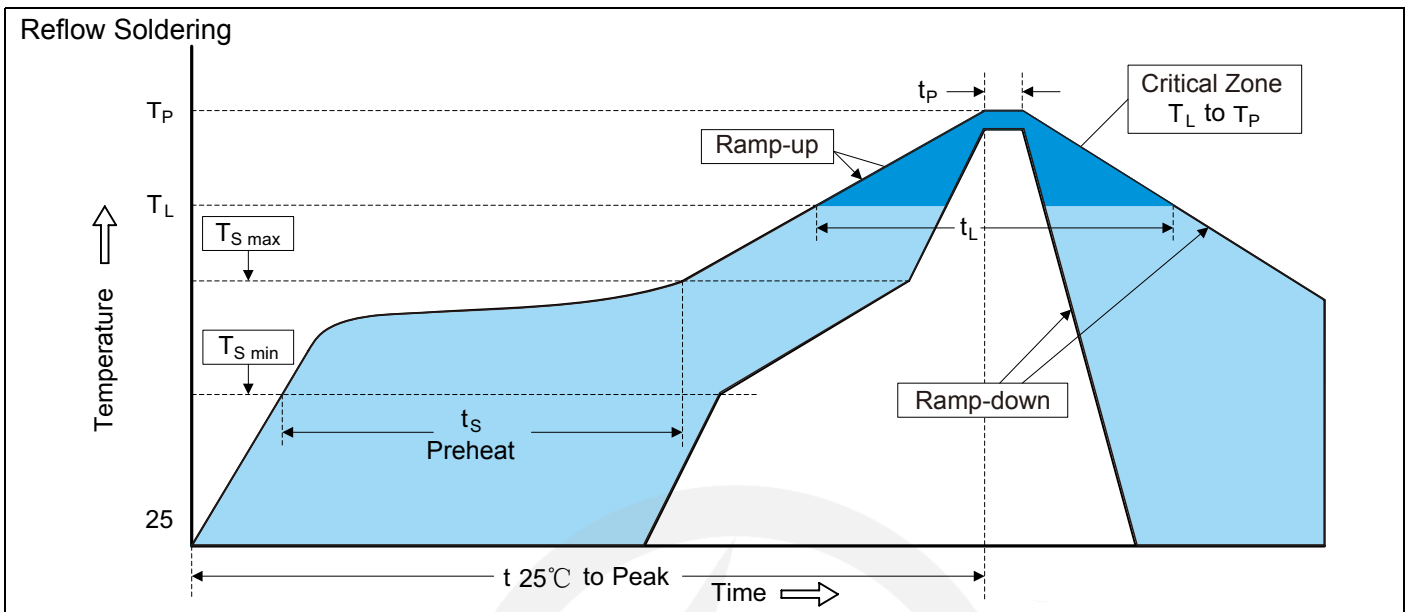
SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.200
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.200
D	2.700	3.100
E	1.200	1.400
E1	2.200	3.000
e	0.950 TYP.	
e1	1.750	2.050
L	0.550 TYP.	
L1	0.300	0.500
θ	0°	8°

SOT-23 Suggested Pad Layout

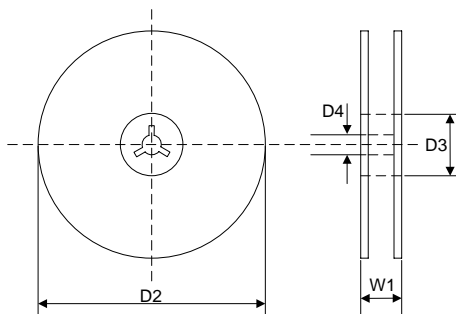


Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purpose only.

Recommended Soldering Conditions

Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3°C/second max.
Preheat	
-Temperature Min ($T_{S\ min}$)	150°C
-Temperature Max ($T_{S\ max}$)	200°C
-Time (min to max) (t_s)	60-180 seconds
$T_{S\ max}$ to T_L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T_L)	217°C
-Time (t_L)	60-150 seconds
Peak Temperature (T_P)	260°C
Time within 5°C of actual Peak Temperature (t_P)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

7" Reel


D2	$\Phi 178.0 \pm 2.0$
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D3	$\Phi 50.0 \text{ Min.}$
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D4	$\Phi 13.0 \pm 0.5$
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W1	16.0 ± 2.0
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Quantity: 3000PCS