



625 mW
300mW

/ Descriptions

Silicon PNP transistor in a SOT-23 Plastic Package.

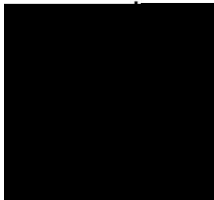
/ Features

Complementary pair with L8050M.

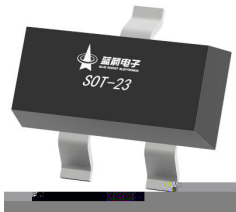
/ Applications

Power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Emitter PIN 3 Collector

/ h_{FE} Classifications & Marking

h_{FE}

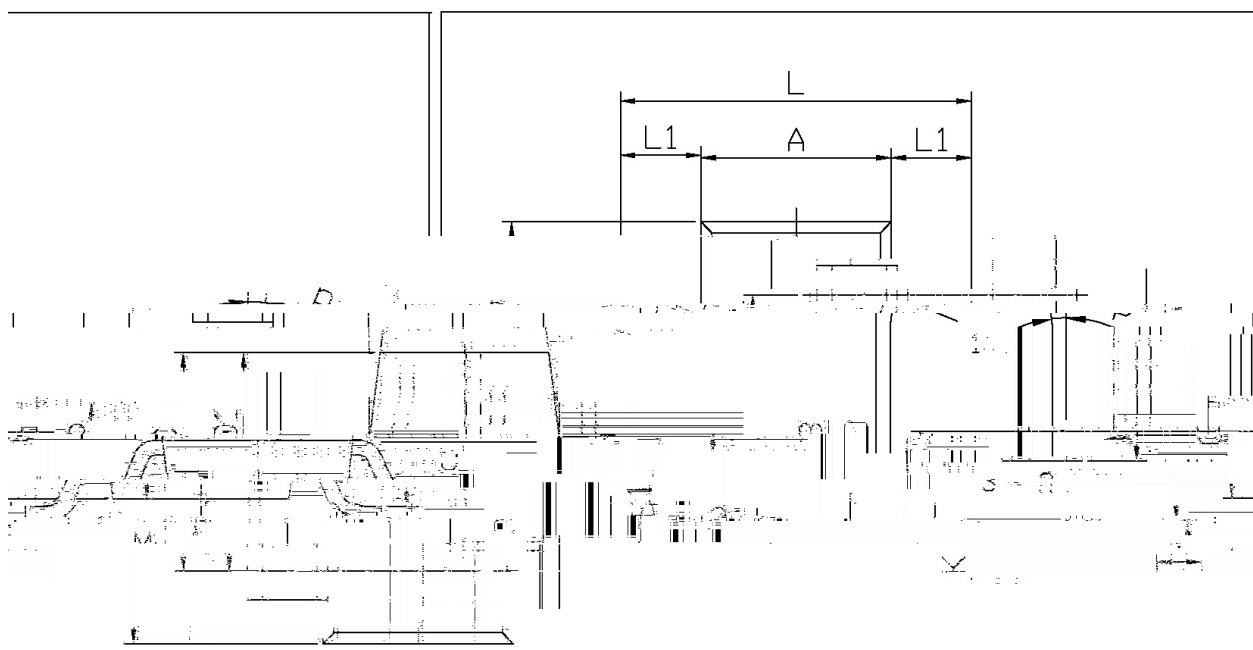
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-20	V
Emitter to Base Voltage	V_{EBO}	-6.0	V
Collector Current - Continuous	I_C	-1.5	A
Base Current - Continuous	I_B	-0.5	A
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

/ Electrical Characteristics(Ta=25)

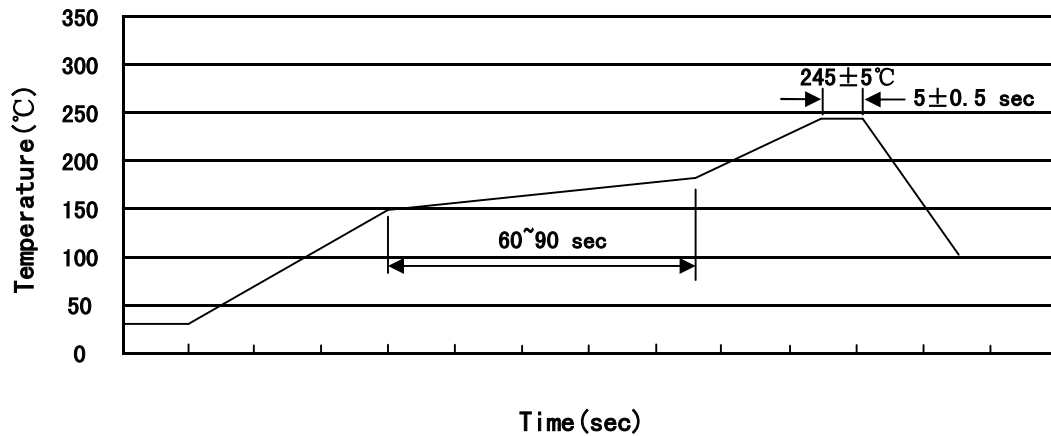
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-0.1mA$ $I_E=0$	-30			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-2.0mA$ $I_B=0$	-20			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-0.1mA$ $I_C=0$	-6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-30V$ $I_E=0$			-0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-6.0V$ $I_C=0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-1.0V$ $I_C=-100mA$	85		300	
	$h_{FE(2)}$	$V_{CE}=-1.0V$ $I_C=-800mA$	40			
	$h_{FE(3)}$	$V_{CE}=-1.0V$ $I_C=-5.0mA$	45			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-800mA$ $I_B=-80mA$		-0.28	-0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-800mA$ $I_B=-80mA$		-0.98	-1.2	V
Base to Emitter Saturation Voltage	V_{BE}	$V_{CE}=-1.0V$ $I_C=-10mA$		-0.66	-1.0	V
Transition Frequency	f_T	$V_{CE}=-10V$ $I_C=-50mA$	100	200		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V$ $f=1.0MHz$ $I_E=0$		15		pF

/ Package Dimensions



Max	Symbol	Min	Max	Symbol	Min
2.7	C	1.30	Max		2.2
0.65	C1	0.90	1.20	L1	0.45
1.50	E	0.25	0.20	A	1.15
3.10	K	0	0.10	B	2.70
2.10	M	0.20	MIN	E	1.70
1.05	P	7°		E1	0.85
0.55				b	0.35

() / **Temperature Profile for IR Reflow Soldering(Pb-Free)**



说明：

- 1、预热温度 150 ~ 180°C，时间 60 ~ 90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

/ **Resistance to Soldering Heat Test Conditions**

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

/ **Packaging SPEC.**

卷盘包装 / REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	6	180,000	7" x8	180×120×180	390×385×205

/ **Notices**