

/ Descriptions

SOT-23

NPN

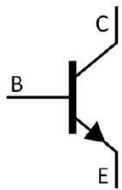
Silicon NPN transistor in a SOT-23 Plastic Package.

/ Features

, 2SB1198K

High breakdown, low $V_{CE(sat)}$, complements the 2SB1198K.**/ Applications**

Medium power amplifier applications.



PIN1 Base

PIN 2 Collector

PIN 3 Emitter

/ h_{FE} Classifications & Marking

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	80	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	500	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

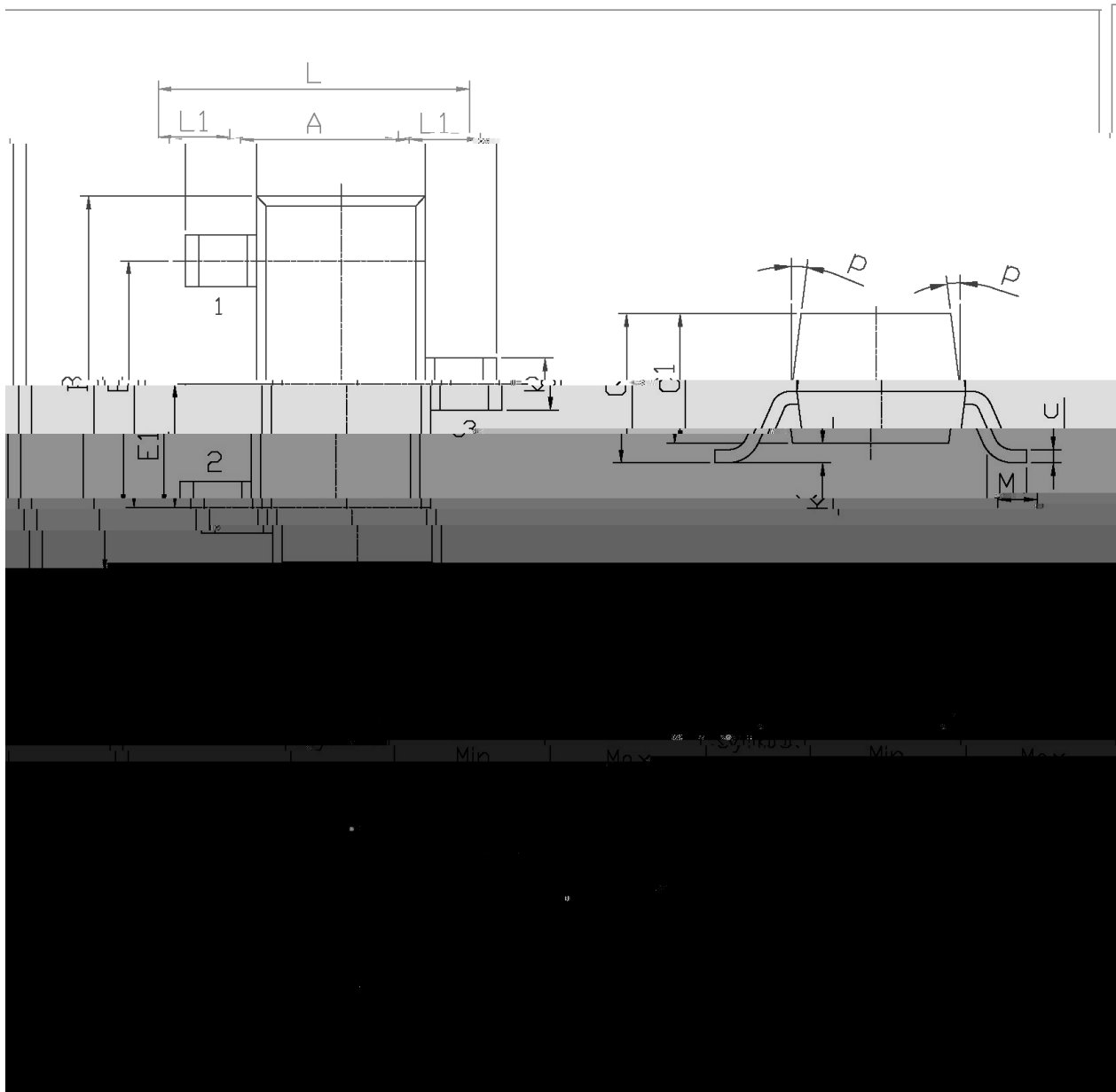
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=50\text{ A}$	80			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=2\text{mA}$	80			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=50\text{ A}$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=50\text{ V}$ $I_E=0$			0.5	A
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=4.0\text{V}$ $I_C=0$			0.5	A
DC Current Gain	h_{FE}	$V_{CE}=3.0\text{V}$ $I_C=100\text{mA}$	120		390	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}$ $I_B=50\text{mA}$		0.2	0.5	V
Transition Frequency	f_T	$I_C=50\text{mA}$ $f=100\text{MHz}$ $V_{CE}=10\text{V}$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}$ $I_E=0$ $f=1.0\text{MHz}$		7.5		pF

T

/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



H

AJ

R h_{FE}

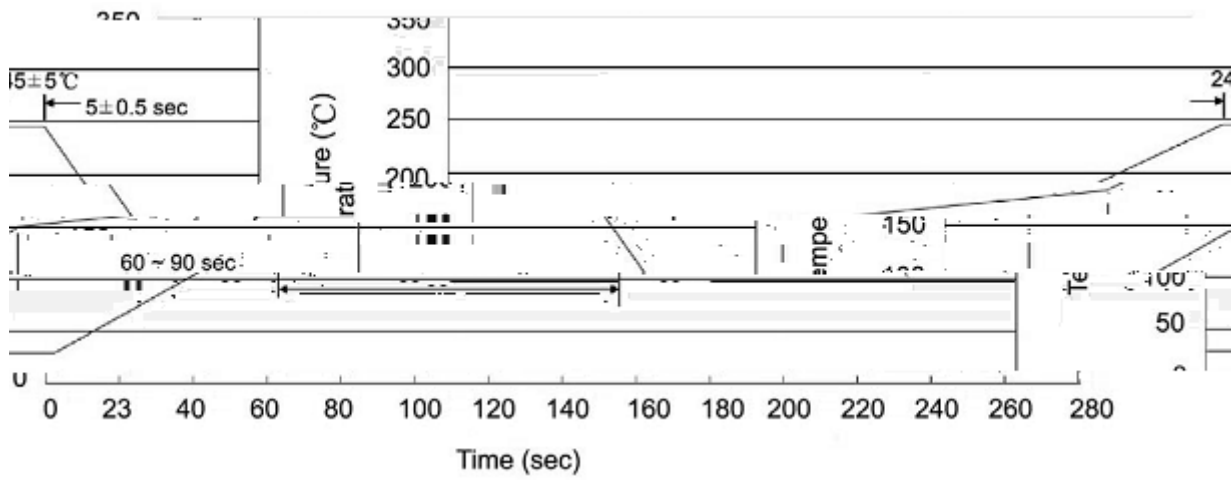
Note:

H: Company Code.

AJ: Product Type Code.

R: h_{FE} Classifications Symbol Code.

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



Note:

- 1

25 150

60 90sec;

1.Preheating:25~150 , Time:60~90sec.
- 2

245±5

5±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices