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# 2SB1661L, 2SB1661S

Silicon PNP Triple Diffused  
Low Frequency Amplifier

## HITACHI

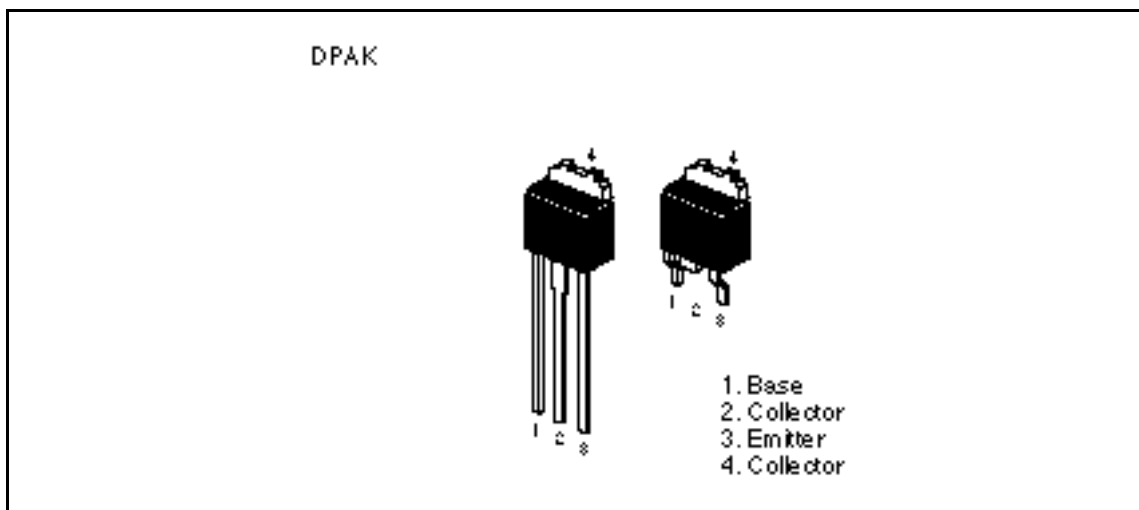
1st. Edition  
December 1997  
Target Specification

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### Features

- High voltage :  $V_{(BR)CEO} = -300V$  min.

### Outline



## 2SB1661L, 2SB1661S

### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to Base voltage	$V_{CBO}$	-300	V
Collector to Emitter voltage	$V_{CEO}$	-300	V
Emitter to Base voltage	$V_{EBO}$	-5	V
Collector current	$I_C$	-0.15	A
Collector peak current	$I_{C(peak)}$	-0.6	A
Collector power dissipation	$P_C$ <sup>Note1</sup>	10	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

Note: 1. Value at  $T_c = 25^\circ\text{C}$

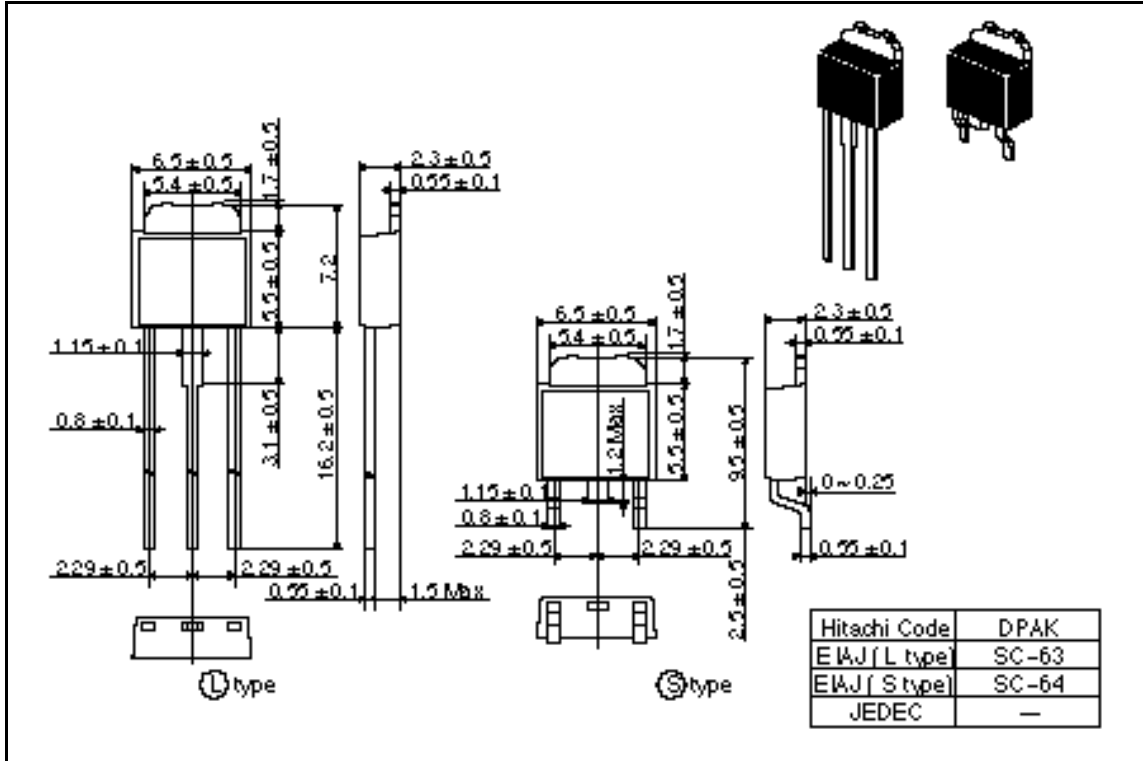
### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-300	—	—	V	$I_C = -1\text{mA}$ , $R_{BE} =$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10\text{mA}$ , $I_C = 0$
Collector current	$I_{CBO}$	—	—	-10	$\mu\text{A}$	$V_{CB} = -300\text{V}$ , $I_E = 0$
Emitter current	$I_{EBO}$	—	—	-10	$\mu\text{A}$	$V_{EB} = -4\text{V}$ , $I_C = 0$
DC current transfer ratio	$h_{FE1}$	50	—	200		$V_{CE} = -1.5\text{V}$ , $I_C = -20\text{mA}$
DC current transfer ratio	$h_{FE2}$	50	—	—		$V_{CE} = -5\text{V}$ , $I_C = -100\text{mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-1.0		$I_C = -100\text{mA}$ , $I_B = -5\text{mA}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	-1.5		$I_C = -100\text{mA}$ , $I_B = -5\text{mA}$
Gain bandwidth product	$f_T$	—	11	—	MHz	$V_{CE} = -1.5\text{V}$ , $I_C = -20\text{mA}$

2SB1661L, 2SB1661S

Package Dimensions

Unit: mm



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## 2SB1661L, 2SB1661S

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