
2SB1661L, 2SB1661S

Silicon PNP Triple Diffused
Low Frequency Amplifier

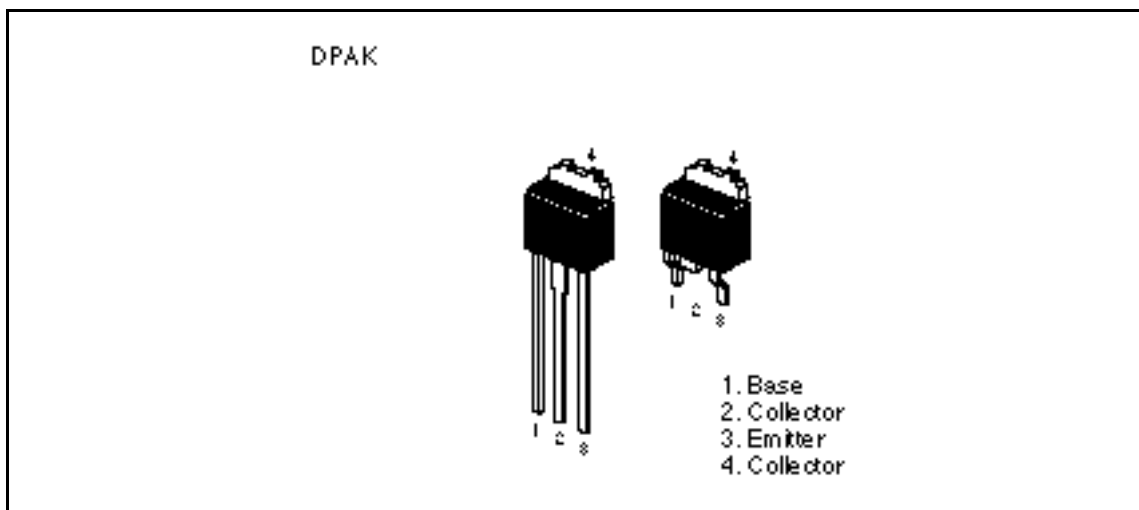
HITACHI

1st. Edition
December 1997
Target Specification

Features

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

Outline



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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 ^{Note1}	10	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

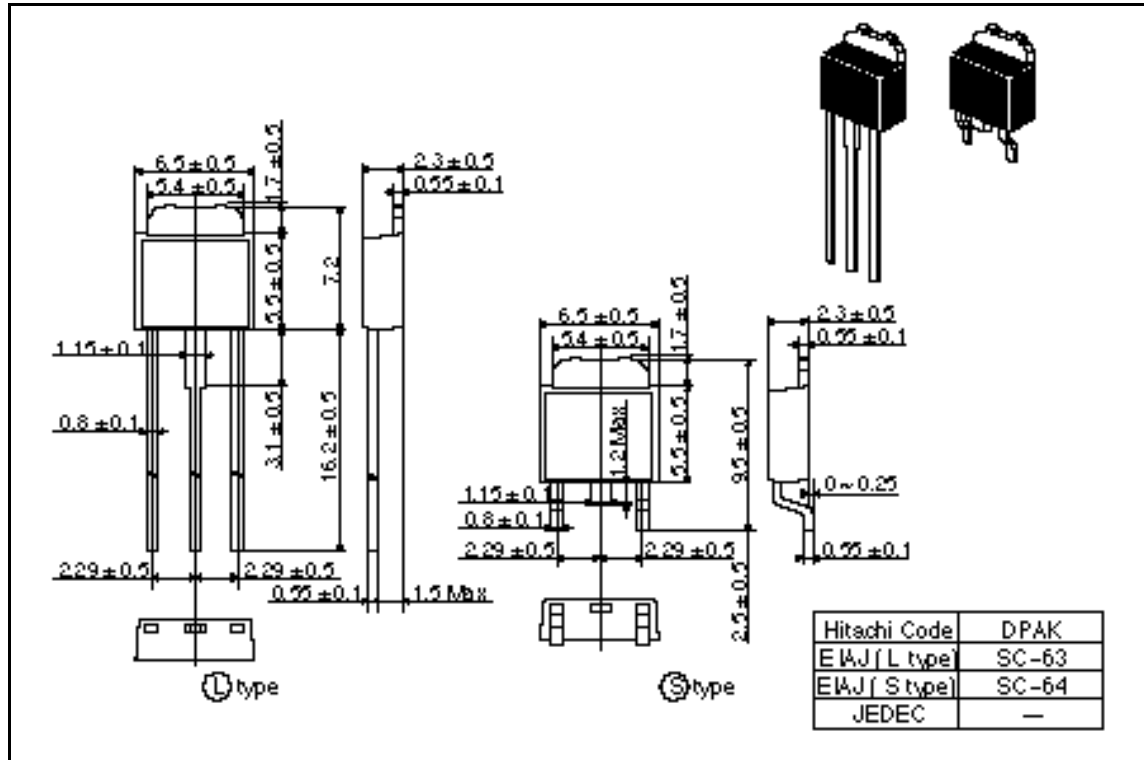
Note: 1. Value at $T_c = 25^\circ\text{C}$

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-300	—	—	V	$I_C = -1\text{mA}$, $R_{BE} = \bullet$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10\text{mA}$, $I_C = 0$
Collector current	I_{CBO}	—	—	-10	mA	$V_{CB} = -300\text{V}$, $I_E = 0$
Emitter current	I_{EBO}	—	—	-10	mA	$V_{EB} = -4\text{V}$, $I_C = 0$
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	$V_{CE} = -1.5\text{V}$, $I_C = -20\text{mA}$

Package Dimensions

Unit: mm



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