2SB1661L, 2SB1661S

Silicon PNP Triple Diffused
Low Frequency Amplifier

HITACHI

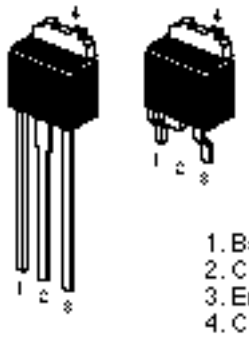
1st. Edition
December 1997
Target Specification

Features

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

Outline

DPAK



1. Base
2. Collector
3. Emitter
4. Collector

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	Pc [Note1]	10	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	–55 to +150	°C

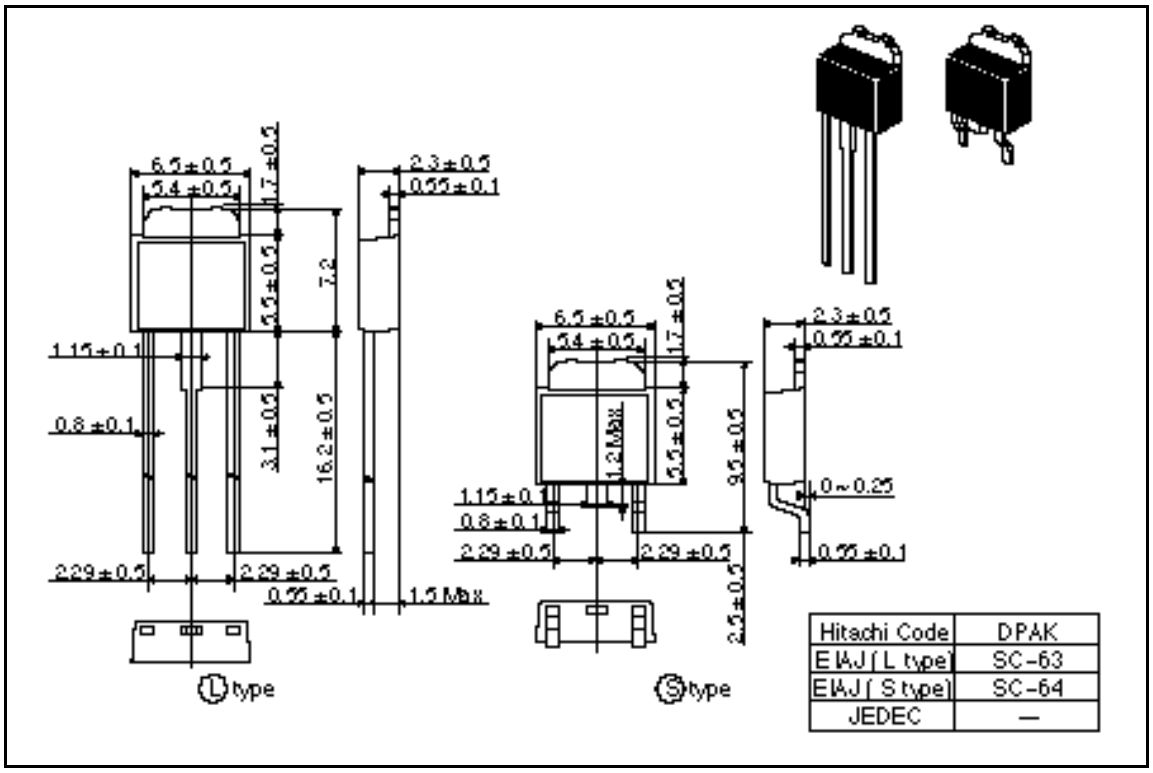
Note: 1. Value at Tc = 25°C

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

Package Dimensions

Unit: mm



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