# 2SD1137

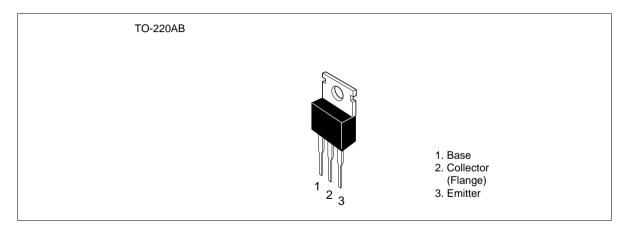
### Silicon NPN Triple Diffused

# **HITACHI**

#### **Application**

Low frequency power amplifier TV vertical deflection output complementary pair with 2SB860

#### Outline



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

Item	Symbol	Rating	Unit
Collector to base voltage	$V_{\text{CBO}}$	100	V
Collector to emitter voltage	V <sub>CEO</sub>	100	V
Emitter to base voltage	$V_{EBO}$	4	V
Collector current	I <sub>c</sub>	4	A
Collector peak current	I <sub>C (peak)</sub>	5	A
Collector power dissipation	P <sub>c</sub>	1.8	W
	P <sub>c</sub> *1	40	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-45 to +150	°C

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

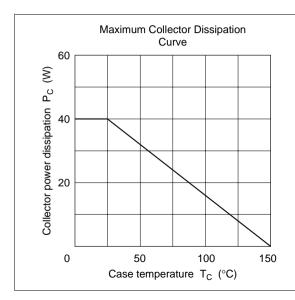


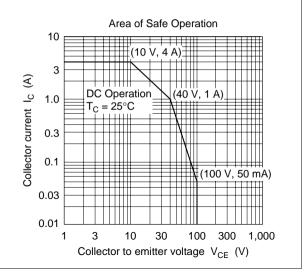
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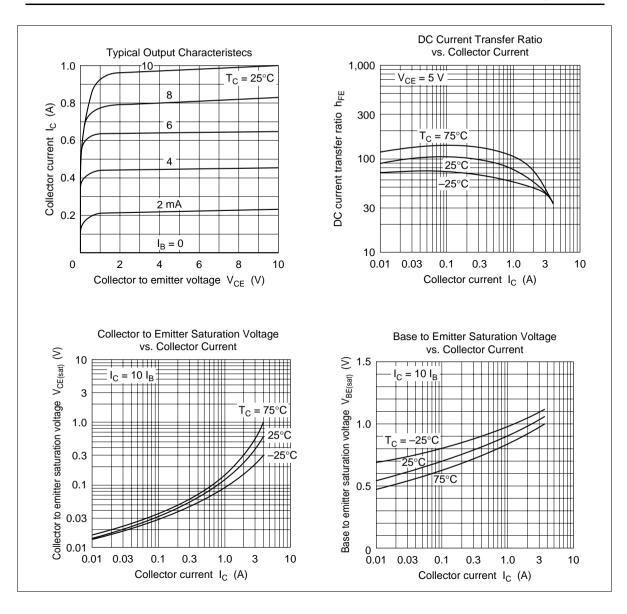
### **Electrical Characteristics** ( $Ta = 25^{\circ}C$ )

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	100	_	_	V	$I_{C}$ = 10 mA, $R_{BE}$ = $\infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	4	_	_	V	$I_{E} = 1 \text{ mA}, I_{C} = 0$
Collector cutoff current	I <sub>CEO</sub>	_	_	100	μΑ	$V_{CE} = 80 \text{ V}, R_{BE} = \infty$
Emitter cutoff current	I <sub>EBO</sub>	_	_	50	μΑ	$V_{EB} = 3.5 \text{ V}, I_{C} = 0$
DC current transfer ratio	$h_{\text{FE}}$	50	_	250		$V_{CE} = 4 \text{ V}$ $I_{C} = 0.5 \text{ A}^{*1}$
		25	_	350		$I_{\rm C}$ = 50 mA
Collector to emitter saturation voltage	V <sub>CE (sat)</sub>	_	_	1.0	V	I <sub>C</sub> = 1 A, I <sub>B</sub> = 0.1 A

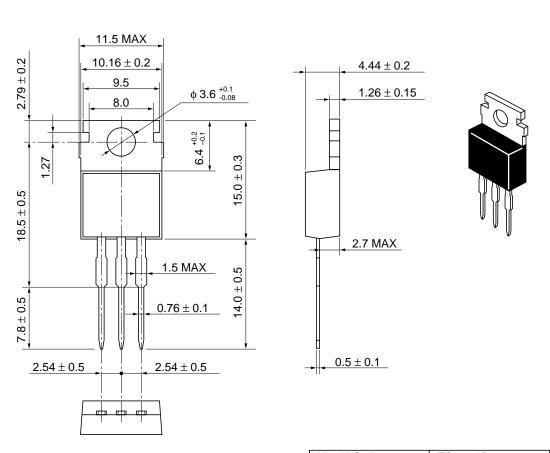
Note: 1. Pulse test.







Unit: mm



Hitachi Code	TO-220AB
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	1.8 g

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