

2SD1137

Silicon NPN Triple Diffused

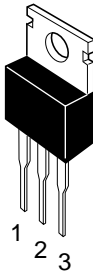
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Application

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

Outline

TO-220AB



1. Base
2. Collector (Flange)
3. Emitter

Absolute Maximum Ratings (Ta = 25°C)

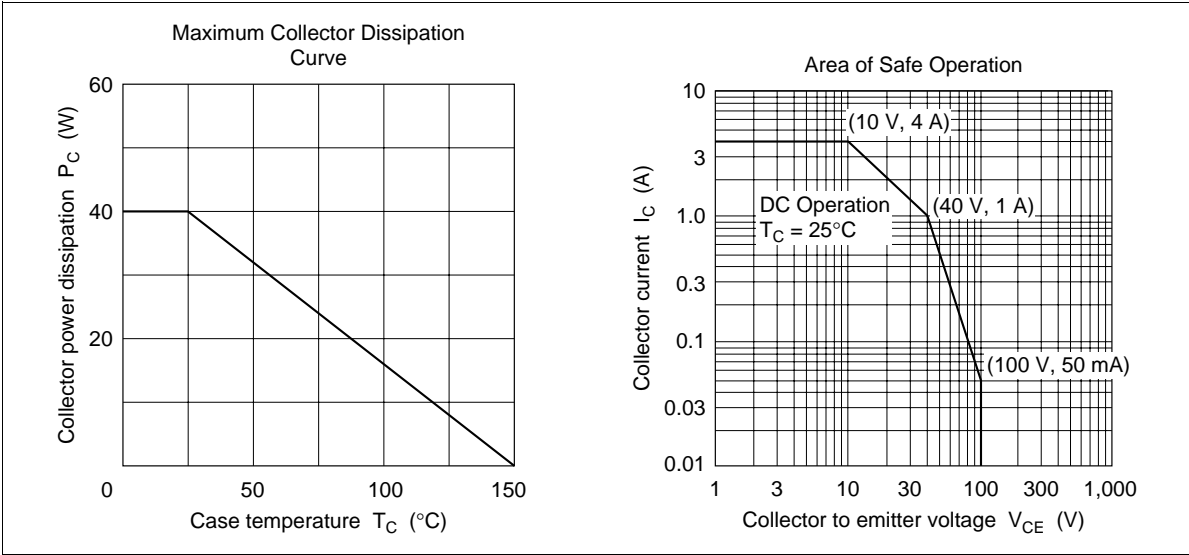
Item	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	100	V
Collector to emitter voltage	V_{CEO}	100	V
Emitter to base voltage	V_{EBO}	4	V
Collector current	I_C	4	A
Collector peak current	$I_{C(peak)}$	5	A
Collector power dissipation	P_C	1.8	W
	P_C^{*1}	40	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-45 to +150	°C

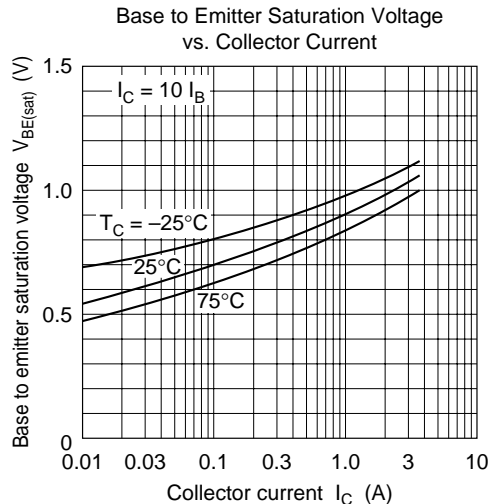
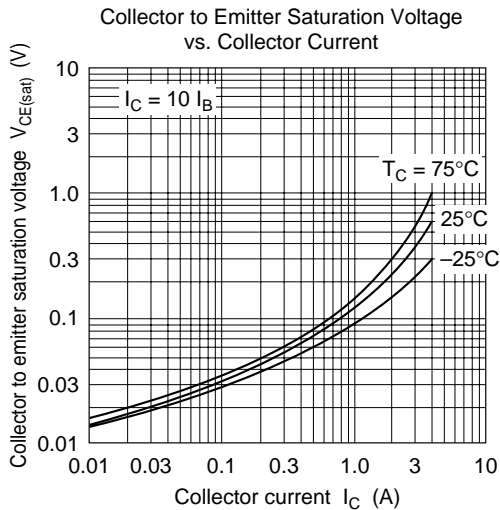
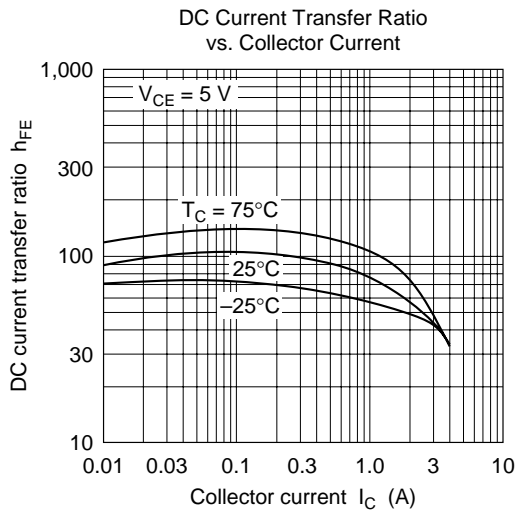
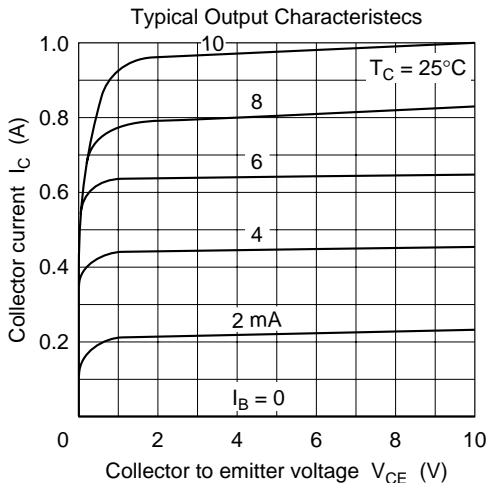
Note: 1. Value at $T_C = 25^\circ\text{C}$.

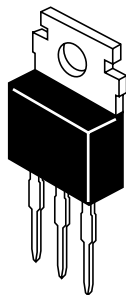
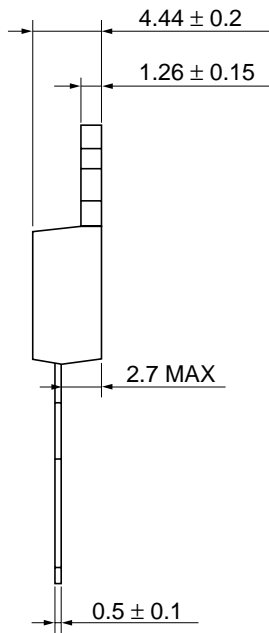
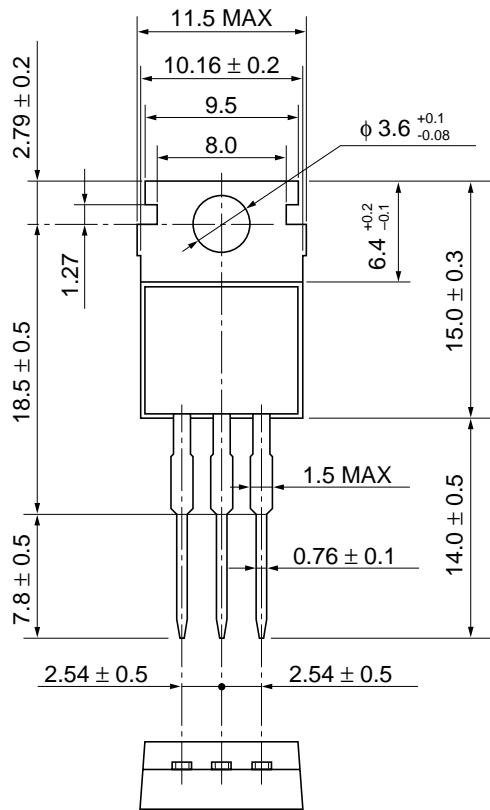
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	100	—	—	V	$I_C = 10\text{ mA}$, $R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	4	—	—	V	$I_E = 1\text{ mA}$, $I_C = 0$
Collector cutoff current	I_{CEO}	—	—	100	μA	$V_{CE} = 80\text{ V}$, $R_{BE} = \infty$
Emitter cutoff current	I_{EBO}	—	—	50	μA	$V_{EB} = 3.5\text{ V}$, $I_C = 0$
DC current transfer ratio	h_{FE}	50	—	250		$V_{CE} = 4\text{ V}$, $I_C = 0.5\text{ A}^{*1}$
		25	—	350		$I_C = 50\text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	1.0	V	$I_C = 1\text{ A}$, $I_B = 0.1\text{ A}$

Note: 1. Pulse test.







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

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