

# 2SB860

Silicon PNP Triple Diffused

RENESAS

ADE-208-861 (Z)

1st. Edition

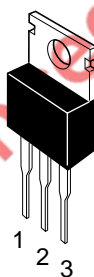
September 2000

## Application

Low frequency power amplifier TV vertical deflection output complementary pair with 2SD1137

## Outline

TO-220AB



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

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

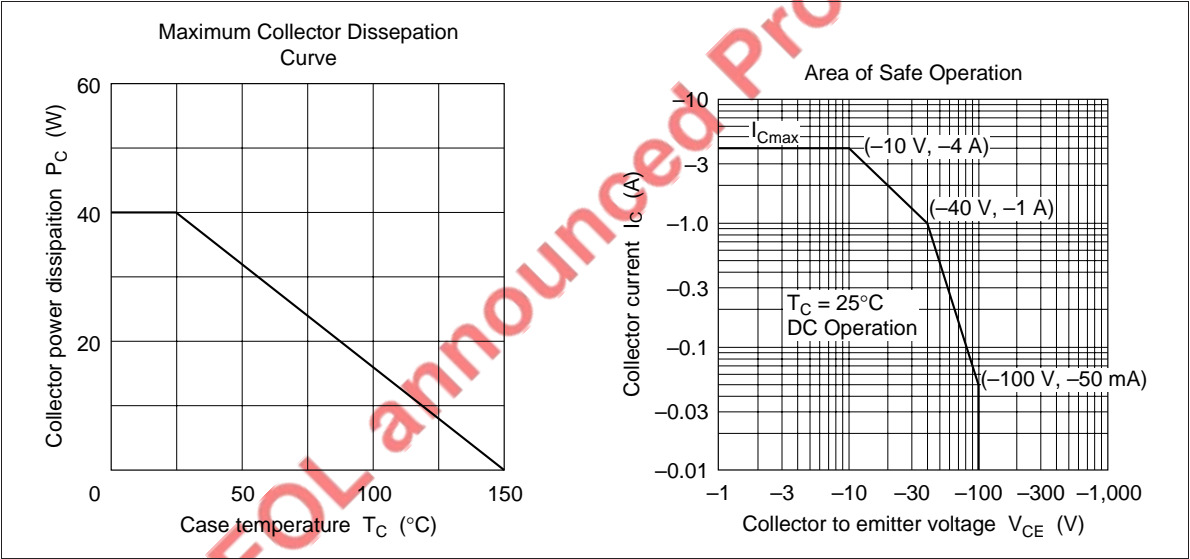
Item	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	-100	V
Collector to emitter voltage	$V_{CE}$	-100	V
Emitter to base voltage	$V_{EBO}$	-4	V
Collector current	$I_C$	-4	A
Collector peak current	$I_{C(peak)}$	-5	A
Collector power dissipation	$P_C$	1.8	W
	$P_C^{*1}$	40	W
Junction temperature	$T_j$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

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

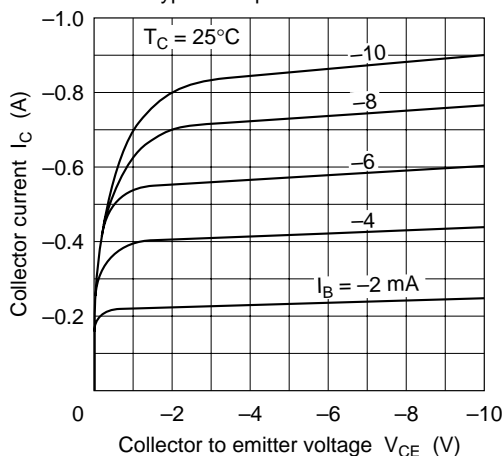
Electrical Characteristics (Ta = 25°C)

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	$\mu\text{A}$	$V_{CE} = -80\text{ V}$ , $R_{BE} = \infty$
Emitter cutoff current	$I_{EBO}$	—	—	-50	$\mu\text{A}$	$V_{EB} = -3.5\text{ V}$ , $I_C = 0$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-1.0	V	$I_C = -1\text{ A}$ , $I_B = -0.1\text{ A}^{*1}$
DC current transfer ratio	$h_{FE}$	50	—	250	$V_{CE} = -4\text{ V}$	$I_C = -0.5\text{ A}^{*1}$
		25	—	350		$I_C = -50\text{ mA}$

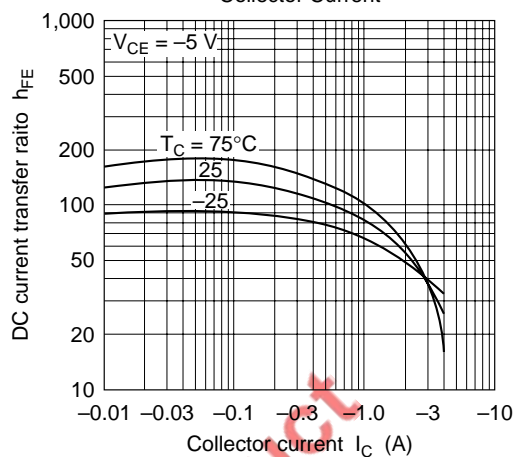
Note: 1. Pulse test



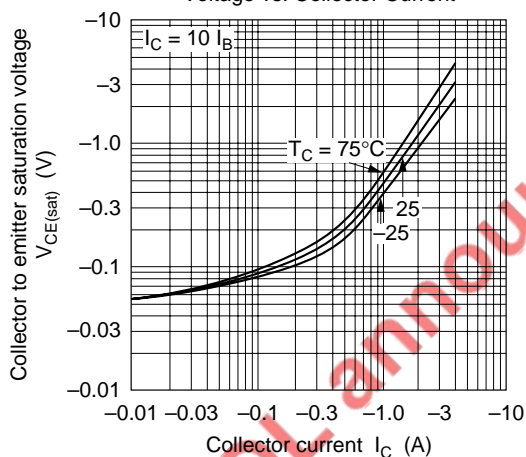
Typical Output Characteristics



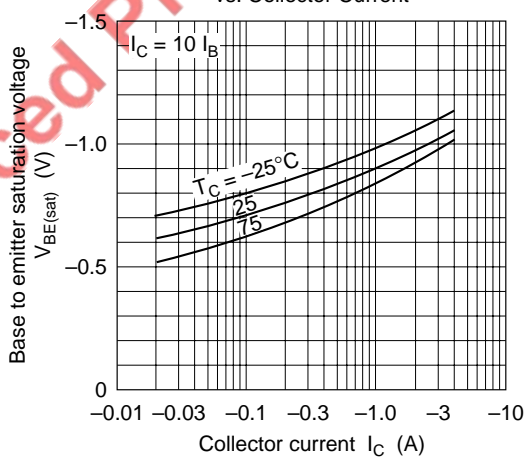
DC Current Transfer Ratio vs. Collector Current



Collector to Emitter Saturation Voltage vs. Collector Current



Base to Emitter Saturation Voltage vs. Collector Current



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