

# 2SB1392

Silicon PNP Triple Diffused

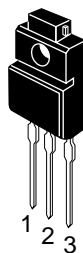
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## Application

Low frequency power amplifier

## Outline

TO-220FM



- 1. Base
- 2. Collector
- 3. Emitter

## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{\text{CBO}}$	-70	V
Collector to emitter voltage	$V_{\text{CEO}}$	-60	V
Emitter to base voltage	$V_{\text{EBO}}$	-5	V
Collector current	$I_{\text{C}}$	-4	A
Collector peak current	$I_{\text{C(peak)}}$	-8	A
Collector power dissipation	$P_{\text{C}}$	2	W
	$P_{\text{C}}^{*1}$	25	
Junction temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$

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

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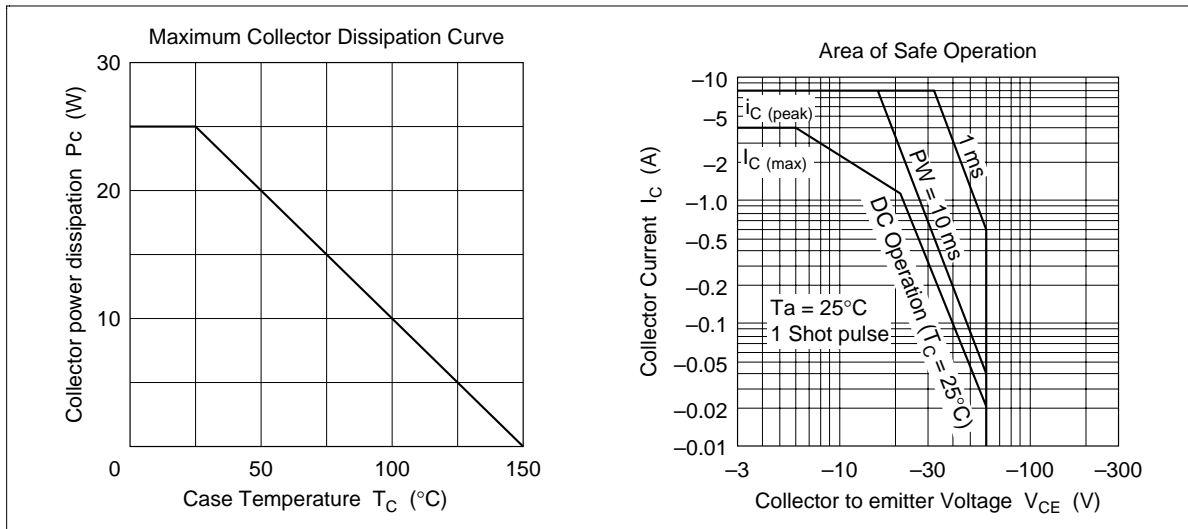
### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-70	—	—	V	$I_C = -10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-60	—	—	V	$I_C = -50 mA, R_{BE} =$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10 \mu A, I_C = 0$
Collector cutoff current	$I_{CBO}$	—	—	-10	$\mu A$	$V_{CB} = -50 V, I_E = 0$
	$I_{CEO}$	—	—	-10		$V_{CE} = -50 V, R_{BE} =$
DC current transfer ratio	$h_{FE1}^{*2}$	60	—	200		$V_{CE} = -4 V, I_C = -1 A^{*1}$
	$h_{FE2}$	35	—	—		$V_{CE} = -4 V, I_C = -0.1 A^{*1}$
Base to emitter voltage	$V_{BE}$	—	—	-1.0	V	$V_{CE} = -4 V, I_C = -1 A^{*1}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-1.0	V	$I_C = -2.0 A, I_B = -0.2 A^{*1}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	-1.2	V	$I_C = -2.0 A, I_B = -0.2 A^{*1}$

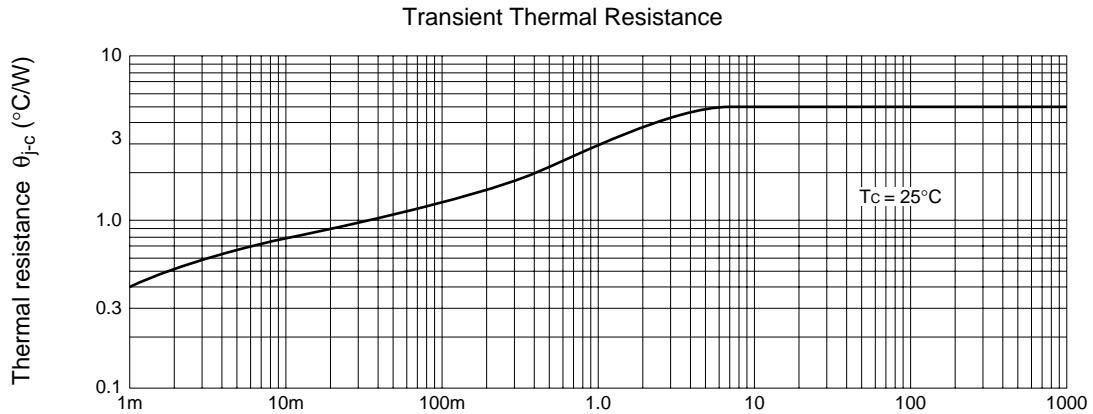
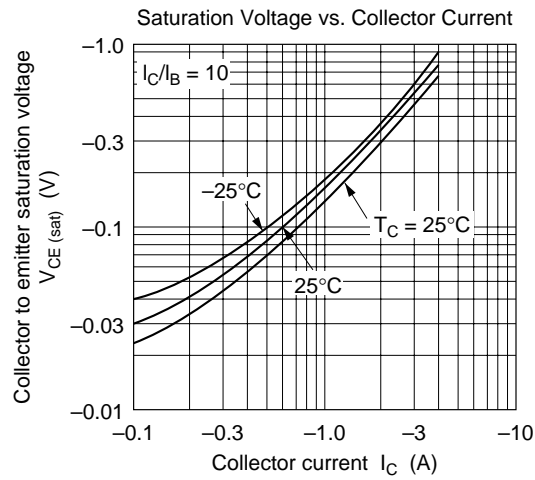
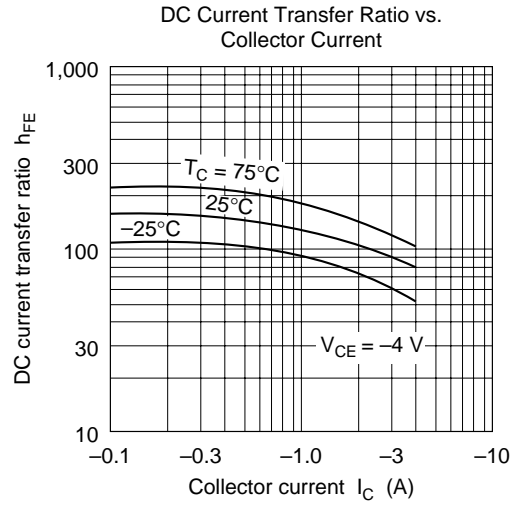
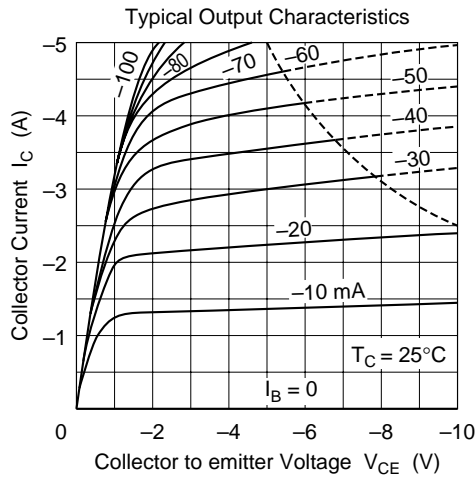
Notes: 1. Pulse test.

2. The 2SB1392 is grouped by  $h_{FE1}$  as follows.

B	C
60 to 120	100 to 200



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